

**CONFIDENTIAL**

Release Date \_\_\_\_\_

COUNTY Apache AREA Alpine Prospect LEASE NO. USDA-Forest Service

WELL NAME PHILLIPS PETROLEUM CO. 11 TEMPERATURE GRADIENT HOLES (See attached listing)

LOCATION \_\_\_\_\_ SEC \_\_\_\_\_ TWP \_\_\_\_\_ RANGE \_\_\_\_\_ FOOTAGE \_\_\_\_\_  
ELEV \_\_\_\_\_ GR \_\_\_\_\_ KB \_\_\_\_\_ SPUD DATE See completion reports STATUS \_\_\_\_\_ TOTAL \_\_\_\_\_  
COMP. DATE 11-29-82 DEPTH See attached

CONTRACTOR \_\_\_\_\_

PERMIT NO.	COUNTY	LOCATION	FOOTAGE	API NO.
818	A-1 Fed. Apache	T. 8 N., R. 27 E., Sec. 15, NE, SE, SW	630' FSL, 2220' FWL	02-001-20266
819	A-2	90 T. 8 N., R. 28 E., Sec. 27, NE, SE, NW	1525' FNL, 2810' FWL	90011-20267
820	A-3	480 T. 8 N., R. 29 E., Sec. 21, SE, NE, NE	1240' FNL, 60' FEL	90002-20268
821	A-4	505 T. 8 N., R. 30 E., Sec. 35, SE, SW, NW	2050' FNL, 1000' FWL	90003-20269
822	A-5	501 T. 8 N., R. 31 E., Sec. 15, SE, NE, SW	1740' FSL, 2620' FEL	90004-20270
823	A-6	325 T. 7 N., R. 27 E., Sec. 15, SE, SE, NE	2000' FNL, 200' FEL	90005-20271
824	A-7	340 T. 6 N., R. 31 E., Sec. 4, NE, NE, NE	65' FNL, 685' FEL	90006-20272
825	A-8	425 T. 6 N., R. 29 E., Sec. 36, SE, SE, NE	2587' FNL, 250' FEL	90007-20273
826	A-9	345 T. 5 N., R. 31 E., Sec. 5, NE, NW, SE	2798' FNL, 1940' FEL	90008-20274
827	A-10	505 T. 5 N., R. 30 E., Sec. 22, SE, SE, SE	595' FSL, 555' FEL	90009-20275
828	A-11	480 T. 5 N., R. 31 E., Sec. 34, SW, SW, SW	685' FSL, 450' FWL	90010-20276

ELECTRIC LOGS <u>Lithologic for each</u>	PERFORATED INTERVALS	PROD. INTERVALS	SAMPLE LOG SAMPLE DESCRP. _____ SAMPLE NO. _____ CORE ANALYSIS _____ DSTs _____
REMARKS _____			APP. TO PLUG _____ PLUGGING REP. _____ COMP. REPORT _____

WATER WELL ACCEPTED BY \_\_\_\_\_

BOND CO. Safeco Ins. Co. of America (filed P/N 763 thru 769) BOND NO. 41 00 446  
DATE 1-27-81  
BOND AMT. \$ 25,000 CANCELLED \_\_\_\_\_ ORGANIZATION REPORT x  
FILING RECEIPT 2297 LOC. PLAT x WELL BOOK xxxxx PLAT BOOK x  
API NO. See attached DATE ISSUED 8-10-82 DEDICATION NA

PERMIT NUMBER 818 thru 828

**CONFIDENTIAL**

(over)

Release Date \_\_\_\_\_

RECEIVED

## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DEC 1 1982

DESIGNATE TYPE OF COMPLETION:																			
New Well	<input checked="" type="checkbox"/>	Work-Over	<input type="checkbox"/>	Deepen	<input type="checkbox"/>	Plug Back	<input type="checkbox"/>	Same Reservoir	<input type="checkbox"/>	Different Reservoir	<input type="checkbox"/>	Oil	<input type="checkbox"/>	O & G CONS. COM.	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Dry	<input type="checkbox"/>
DESCRIPTION OF WELL AND LEASE																			
Operator Phillips Petroleum Co.										Address 655 East 4500 South, Murray, UT 84107									
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service										Well Number A-1		Field & Reservoir Temperature Gradient Well							
Location T.8N., R.27E., Sec. 15, NE SE SW										County Apache									
Sec. TWP-Range or Block & Survey																			
Date spudded 10/4/82		Date total depth reached 10/5/82		Date completed, ready to produce		Elevation (DF, RKP, RT or Gr.) 8393		Elevation of casing hd. flange		feet									
Total depth 335'		P.B.T.D.		Single, dual or triple completion?		If this is a dual or triple completion, furnish separate report for each completion.													
Producing interval (s) for this completion										Rotary tools used (interval) To T.D.					Cable tools used (interval)				
Was this well directionally drilled?					Was directional survey made?					Was copy of directional survey filed?					Date filed				
Type of electrical or other logs run (check logs filed with the commission)										Date filed									
CASING RECORD																			
Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)																			
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled													
TUBING RECORD										LINER RECORD									
Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)												
in.	ft.	ft.	in.	ft.	ft.	ft.													
PERFORATION RECORD										ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD									
Number per ft.	Size & type	Depth Interval		Am't. & kind of material used		Depth Interval													
INITIAL PRODUCTION																			
Date of first production					Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)														
Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity													
			bbls.	MCF	bbls.	° API (Corr)													
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio													
			bbls.	MCF	bbls.														
Disposition of gas (state whether vented, used for fuel or sold):																			
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Geologist</u> of the <u>Phillips Petroleum Co.</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.																			
Date November 29, 1982										Signature <i>Gary Bradburn</i>									
Permit No 818										STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 4 File One Copy									

### DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
*See attached lithologic log			

\* Show all important zones of porosity, details of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

O &amp; G CONS. COMM.

Weld No. A-1  
Coordinates \_\_\_\_\_  
Type Drill \_\_\_\_\_  
Bit Size \_\_\_\_\_

PHILLIPS PETROLEUM CO.

Sheet No. \_\_\_\_\_  
Date Started \_\_\_\_\_  
Date Completed \_\_\_\_\_

*Alpine, Arizona*

PHILLIPS PETROLEUM CO.

**GEOLOGIC LOG**

Collar Elevation \_\_\_\_\_  
Total Footage 340  
Overall Core Recovery \_\_\_\_\_  
Logged By Steve Burt Hess

# Geologic Log

[illegible]

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEO THERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

RECEIVED

AUG 9 1982

O & G CONS. COMM.

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS 690 N. Industrial Rd. St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,

NAME OF LESSOR

USDA - Forest Service

WELL NUMBER

A-1

ELEVATION (GROUND)

8393'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY

DEDICATION  
(COMPLY WITH RULE G-105)

2220' E 630' N fr SW cor. Sec. 15  
FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

T8N-R27E, Sec. 15, NE SE SW

COUNTY

Temperature gradient well

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

WELL STATUS

WELL

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

8-5-82

DATE

PERMIT NUMBER: 818

APPROVAL DATE: 8-10-82

APPROVED BY: R.A. yfana

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THIS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. G-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SHOW ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES ☐ NO ☒

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES ☐ NO ☒ IF ANSWER IS "YES" TYPE OF CONSOLIDATION

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T8N-R27E, Sec. 15

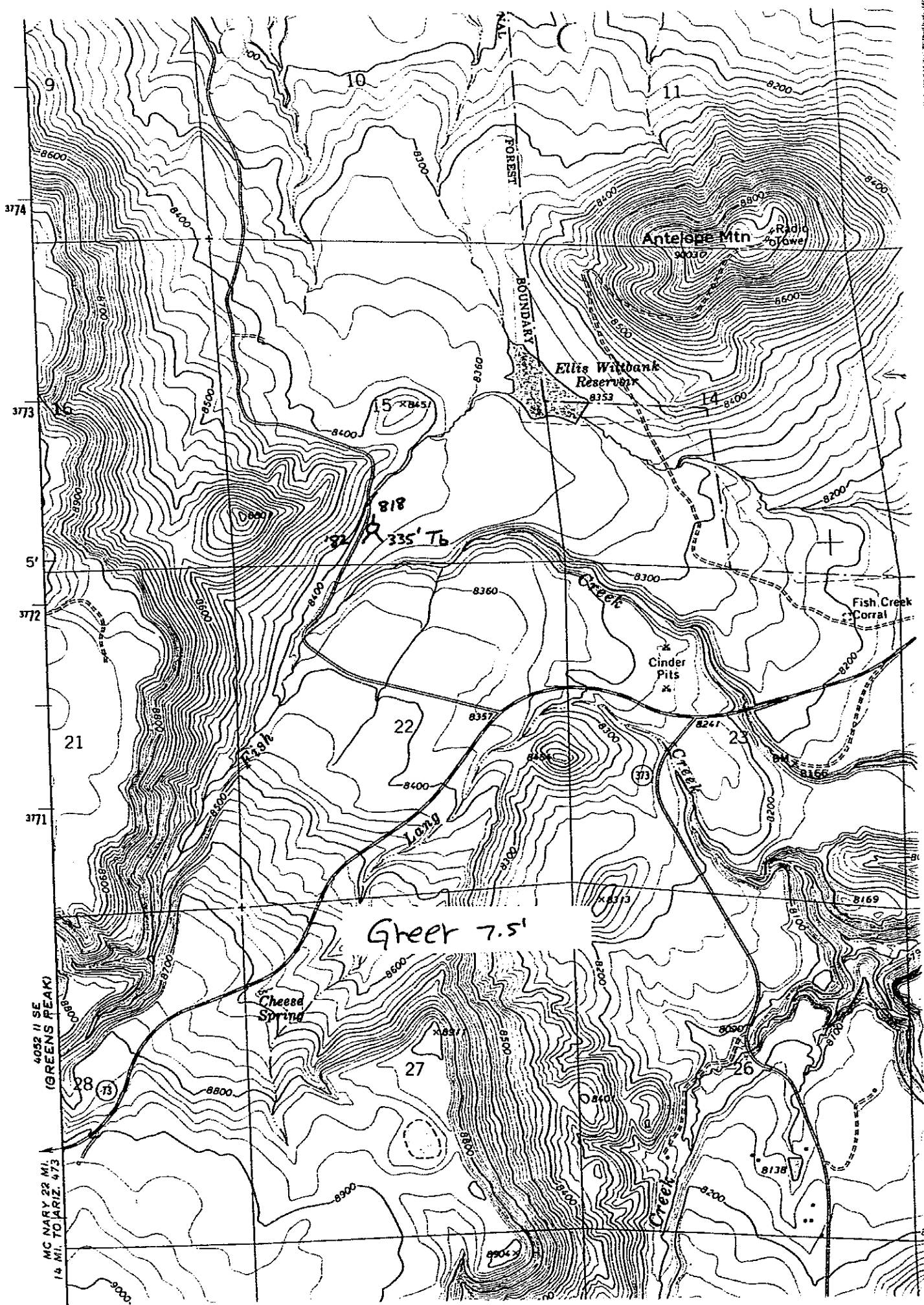
CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
Name	<i>Ray Chadburn</i>
Position	Geologist
Company	Phillips Petroleum
Date	8-5-82
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

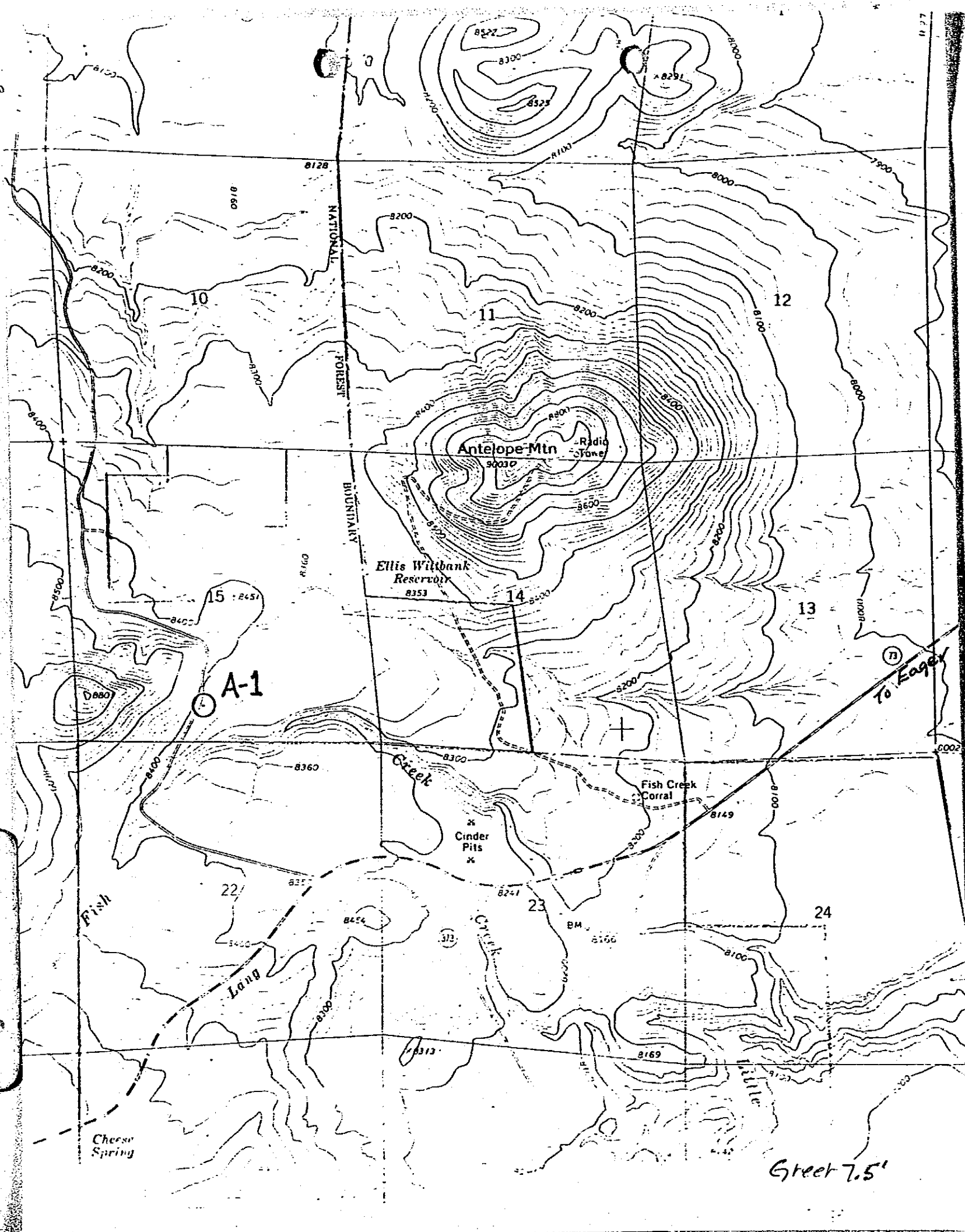
Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe filled with water. Measure temperature there in. Plug and abandon within a year.					Plugged at bottom and	

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe filled with water. Measure temperature there in. Plug and abandon within a year.					Plugged at bottom and	









## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-1 FEDERAL

(WELL NAME)

located 630' FROM SOUTH LINE & 2220' FROM WEST LINE (NE SE SW)

Section 15 Township 8 NORTH Range 27 EAST, APACHE County, Arizona.

The NA of said

Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 1982.

OIL AND GAS CONSERVATION COMMISSION

By

R. C. [Signature]

EXECUTIVE SECRETARY

PERMIT

Nº

818

RECEIPT NO. 2297

API NO. 02-001-20266

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

RECEIVED

DEC 11 1982

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG																	
O & G CONS. COMM.																	
DESIGNATE TYPE OF COMPLETION:																	
New Well	<input checked="" type="checkbox"/>	Work-Over	<input type="checkbox"/>	Deepen	<input type="checkbox"/>	Plug Back	<input type="checkbox"/>	Same Reservoir	<input type="checkbox"/>	Different Reservoir	<input type="checkbox"/>	Oil	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Dry	<input type="checkbox"/>
DESCRIPTION OF WELL AND LEASE																	
Operator Phillips Petroleum Company						Address 655 East 4500 South, Murray, UT 84107											
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service						Well Number A-2		Field & Reservoir Temperature Gradient Well									
Location T.8N., R.28E., Sec. 27, NE SE NW						County Apache											
Sec. TWP-Range or Block & Survey																	
Date spudded 10/2/82		Date total depth reached 10/3/82		Date completed, ready to produce		Elevation (DF, RKB, RT or Gr.) 8370		Elevation of casing hd. Range		feet							
Total depth 90'		P.B.T.D.		Single, dual or triple completion?		If this is a dual or triple completion, furnish separate report for each completion.											
Producing interval (s) for this completion				Rotary tools used (interval) To T.D.				Cable tools used (interval)									
Was this well directionally drilled?		Was directional survey made?		Was copy of directional survey filed?				Date filed									
Type of electrical or other logs run (check logs filed with the commission)								Date filed									
CASING RECORD																	
Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)																	
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled											
TUBING RECORD					LINER RECORD												
Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)										
PERFORATION RECORD					ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD												
Number per ft.	Size & type	Depth Interval			Am't. & kind of material used		Depth Interval										
INITIAL PRODUCTION																	
Date of first production		Producing method (indicate if flowing, gas lift or pumping—If pumping, show size & type of pump:)															
Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)											
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio											
Disposition of gas (state whether vented, used for fuel or sold):																	
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Geologist</u> of the <u>Phillips Petroleum Company</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.																	
Date <u>November 29, 1982</u>		Signature <u>Gary Chadburn</u>															
Form No. 4					STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log File One Copy												
Page No. 819																	

DETAIL OF FORMATIONS PENETRATED			
Formation	Top	Bottom	Description*
*See attached lithologic log			

**INSTRUCTIONS:**

**Attach drillers log or other acceptable log of well.**

Form No. 4

[illegible]

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER  
GEO THERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS

690 N. Industrial Rd. St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,

WELL NUMBER

ELEVATION (GROUND)

NAME OF LESSOR

USDA - Forest Service

A-2

8370'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY

DEDICATION  
(COMPLY WITH RULE C-105)

2810'E 1525'S fr NW cor. Sec. 27

T8N-R28E, Sec. 27 NE SE NW

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

COUNTY

Temperature gradient well

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

BOND STATUS  
AMOUNT

ORGANIZATION REPORT

OR FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT:  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

8-5-82

DATE

PERMIT NUMBER: 819

APPROVAL DATE: 8-10-82

APPROVED BY: R. A. Yana

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THIS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. C-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SHOW ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES \_\_\_\_\_ NO \_\_\_\_\_. IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T8N-R28E, Sec. 27

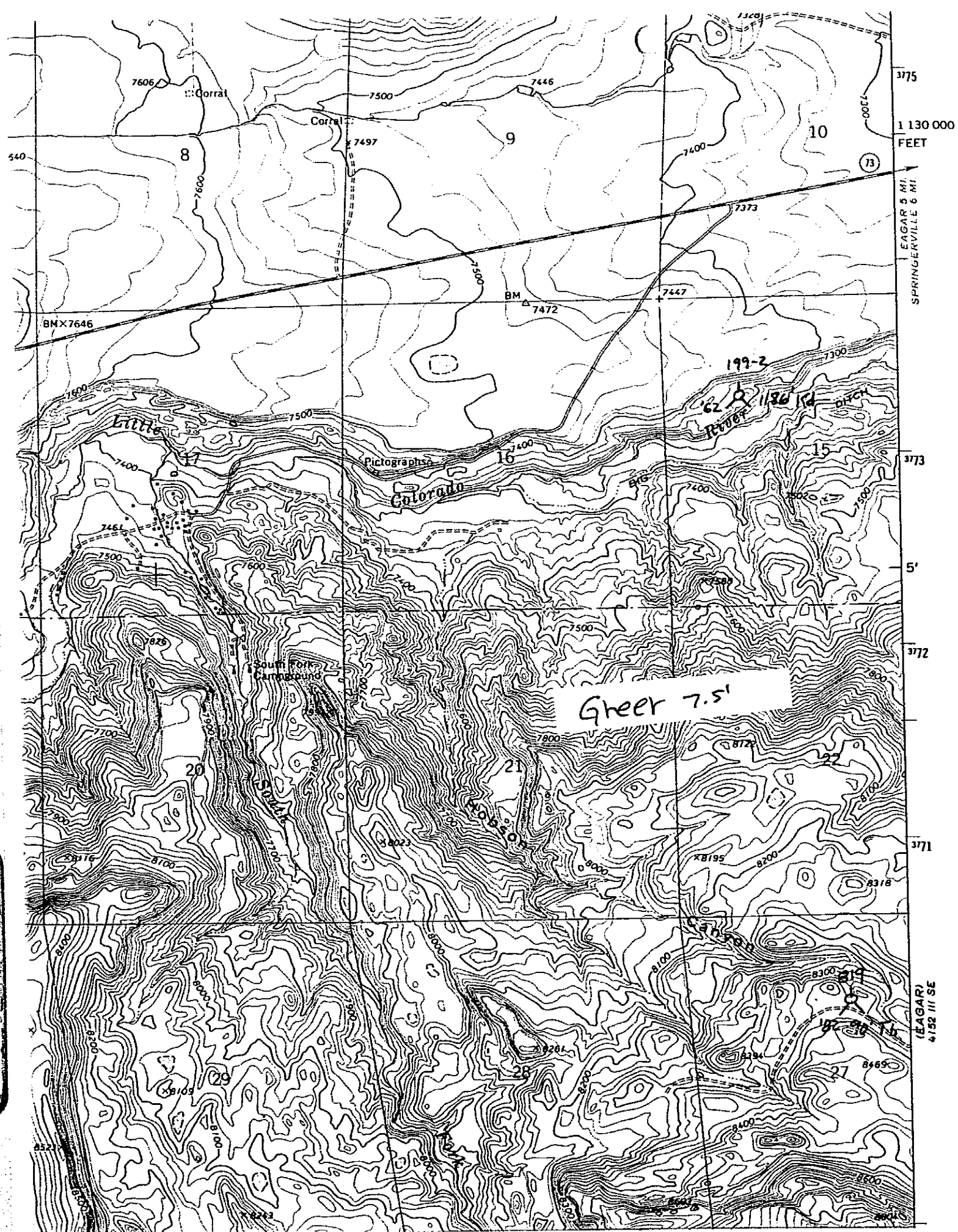
CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
Name	<i>Gay Chadburn</i>
Position	Geologist
Company	Phillips Petroleum
Date	8-5-82
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

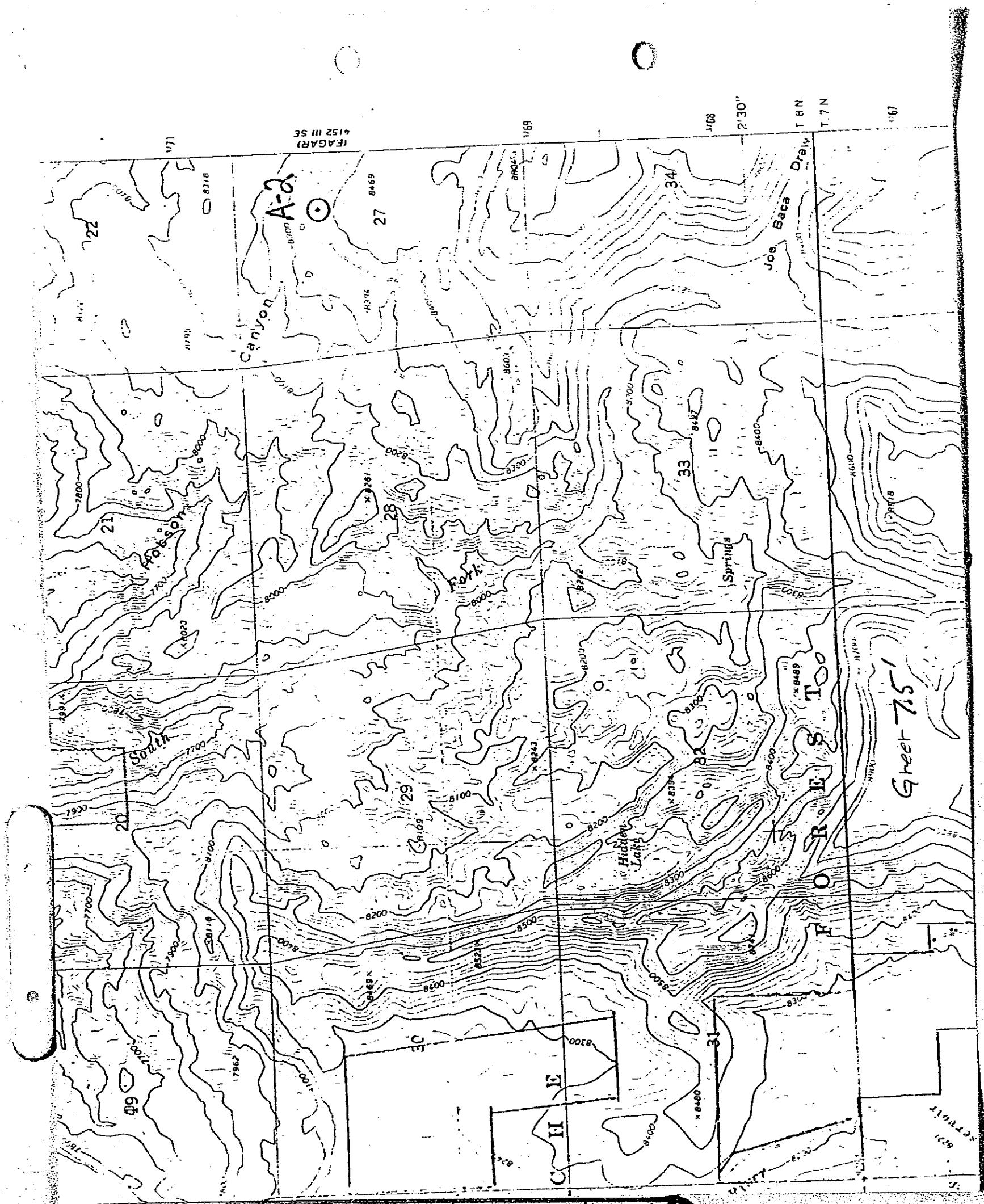
Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. filled with water. Measure temperature there in. Plug and abandon within 2 year.					Plugged at bottom and	

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. filled with water. Measure temperature there in. Plug and abandon within 2 year.					Plugged at bottom and	









## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-2 FEDERAL  
(WELL NAME)

located 1525' FWL & 2810' FWL (NE SE NW)

Section 27 Township 8 NORTH Range 28 EAST, APACHE County, Arizona.

The NA of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 19 82.

OIL AND GAS CONSERVATION COMMISSION

By R. C. Hoffman  
EXECUTIVE SECRETARY

PERMIT No 819

RECEIPT NO. 2297  
API NO. 02-001-20267

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

RECEIVED

DEC 1 1982

## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

O &amp; G CONS. COMM.

New Well ☒ Work-Over ☐ Deepen ☐ Plug Back ☐ Same Reservoir ☐ Different Reservoir ☐ Oil ☐ Gas ☐ Dry ☐

## DESCRIPTION OF WELL AND LEASE

Operator Phillips Petroleum Company	Address 655 East 4500 South, Murray, UT 84107	
Federal, State or Indian Lease Number or name of lessor if fee lease USDA- Forest Service	Well Number A-3	Field & Reservoir Temperature gradient well
Location T.8N., R.29E., Sec. 21, SE NE NE	County Apache	
Sec. TWP-Range or Block & Survey		

Date spudded 10/1/82	Date total depth reached 10/2/82	Date completed, ready to produce	Elevation (DF, RT or Gr) feet 7422	Elevation of casing hd. range feet
Total depth 480'	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.	
Producing interval (s) for this completion		Rotary tools used (interval) To T.D.	Cable tools used (interval)	
Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed	
Type of electrical or other logs run (check logs filed with the commission)			Date filed	

## CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled

## TUBING RECORD

## LINER RECORD

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)

## PERFORATION RECORD

## ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval

## INITIAL PRODUCTION

Date of first production      Producing method (indicate if flowing, gas lift or pumping—if pumping, show size &amp; type of pump:)

Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)

Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Geologist of the Phillips Petroleum Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date November 29, 1982Signature Gary Shadburn

Permit No.

820

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Well Completion or Recompletion Report and Well Log

File One Copy

Form No. 4

(Complete Reverse Side)

### DETAIL OF FORMATIONS PENETRATED

DETAIL OF FORMATION THICKNESS			
Formation	Top	Bottom	Description*
*See attached lithologic log			

\* Show all important zones of permeability, details of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.

Attach drillers log or other acceptable log of well.  
This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil and Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

O &amp; G CONS. COMM.

3-4-2

## Converting to

23

## Day Started

**Date Completed**

**PHILLIPS PETROLEUM CO.**

Alpine, Arizona

**Date Completed**\_\_\_\_\_

### Collar Elevation

**Total Footage** 480

### Overall Core Recovery-

Logged By Stacey Baert Kern

# GEOLOGIC LOG

FROM		TO	FT. OF CORE	TYPE	ROCK DESCRIPTION, ALTERATION AND REMARKS	METALLIZATION	SECTION	DEPTH
0	20				Dark brown Soil and Dark gray-brown Basalt fragments			
20	60				Medium brown Clay			
60					Medium brown Sandstone, poorly indurated, 40% Feldspar, 35% Volcanic materials, 20% Quartz, 5% Ferro-magnetic minerals, minor FeOx staining			
80		80			Medium gray Sandstone, poorly indurated, 40% Feldspar, 35% Volcanic materials, 20% Quartz, 5% Ferro-magnetic minerals			
300	480				Medium Brown Clay			

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEO THERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS 690 N. Industrial Rd., St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,  
NAME OF LESSOR

USDA - Forest Service

WELL NUMBER

A-3

ELEVATION (GROUND)

7422'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY

DEDICATION  
(COMPLY WITH RULE C-105)

1240'S 60'W fr NE cor. Sec. 21  
FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

T8N-R29E Sec. 21 SE NE NE

COUNTY

Temperature gradient well

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

BOND STATUS  
AMOUNT

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

8-5-82

DATE

PERMIT NUMBER:

820

APPROVAL DATE:

8-10-82

APPROVED BY:

R. G. - yfana

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THIS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. C-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SHOW ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES \_\_\_\_\_ NO \_\_\_\_\_. IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T8N-R29E, Sec. 21

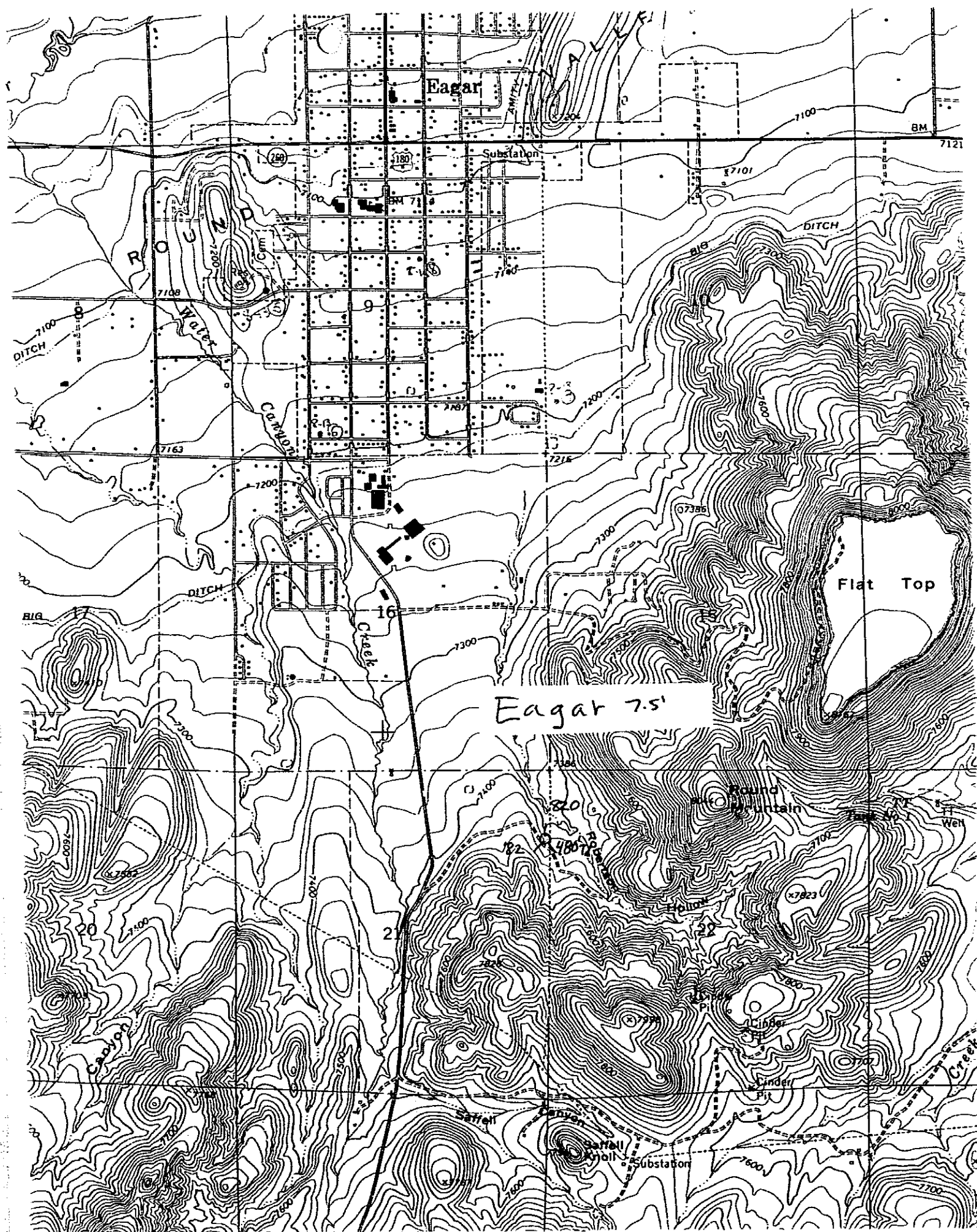
CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
Name	<i>Ray Chadburn</i>
Position	Geologist
Company	Phillips Petroleum
Date	8-5-82
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

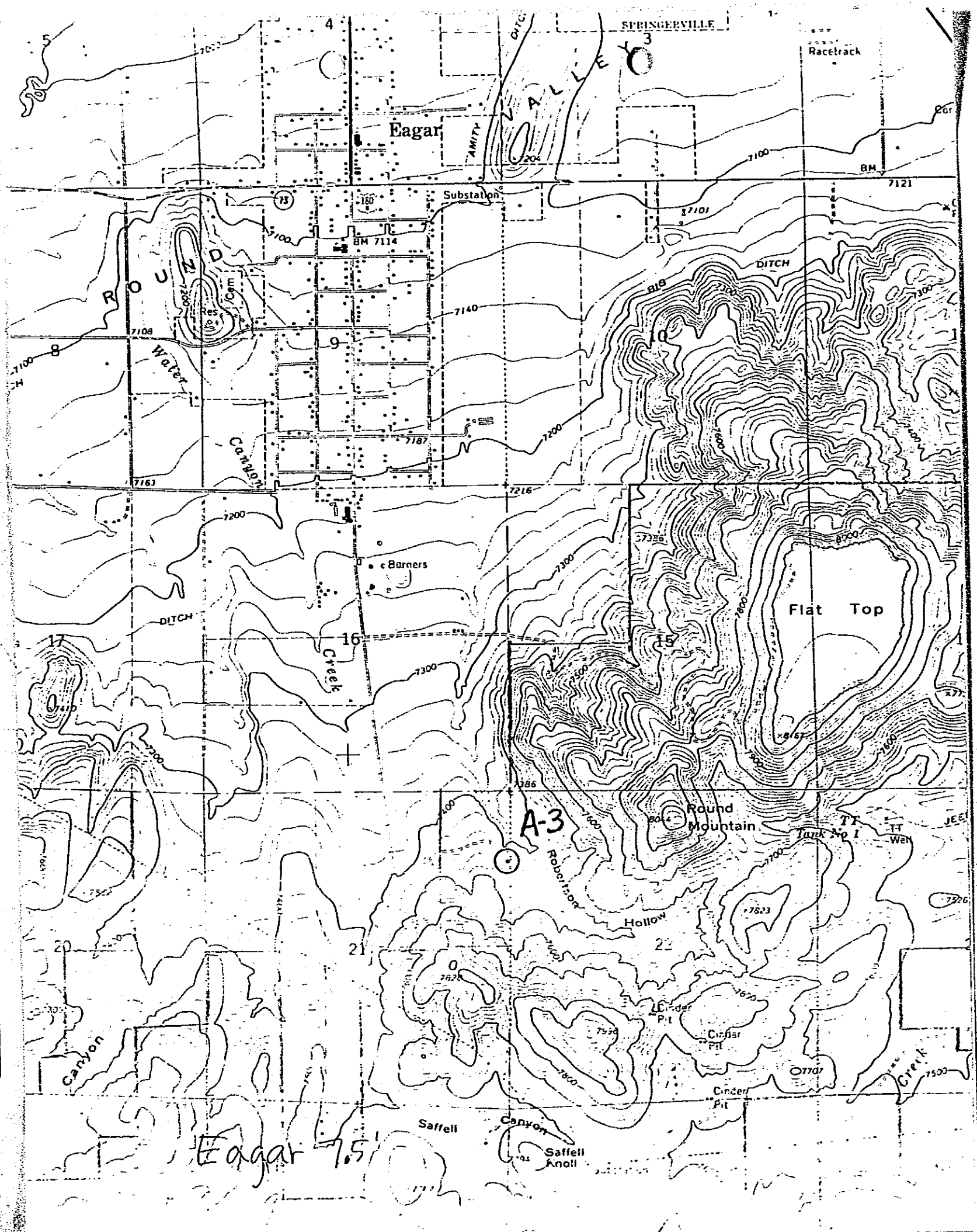
Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. Plugged at bottom and filled with water.						
Measure temperature there in.						
Plug and abandon within 2 year.						

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. Plugged at bottom and filled with water.						
Measure temperature there in.						
Plug and abandon within 2 year.						









## PERMIT TO DRILL

This constitutes the permission and authority from the

OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: **PHILLIPS PETROLEUM COMPANY**  
(OPERATOR)

to drill a well to be known as

**A-3 FEDERAL**  
(WELL NAME)

located **1240' FWL & 60' FWL (SE NE NE)**

Section **21** Township **8 NORTH** Range **29 EAST**, **APACHE** County, Arizona.

The **NA** of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this **10th** day of **August**, 19**82**.

OIL AND GAS CONSERVATION COMMISSION

By *R. G. Uffner*  
EXECUTIVE SECRETARY

PERMIT **Nº 820**

RECEIPT NO. **2297**

API NO. **02-001-20268**

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

RECEIVED

## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DEC 1 1982

## DESIGNATE TYPE OF COMPLETION:

New Well ☒ Work-Over ☐ Deepen ☐ Plug Back ☐ Same Reservoir ☐ Different Reservoir ☐ Oil ☐ Gas ☐ Dry ☐ O & G CONS. COMM

## DESCRIPTION OF WELL AND LEASE

Operator Phillips Petroleum Company	Address 655 East 4500 South, Murray, UT 84107	
Federal, State or Indian Lease Number or name of lessor if fee lease USDA- Forest Service	Well Number A-4	Field & Reservoir Temperature gradient well
Location T.8N., R.30E., Sec. 35, SE SW NW	County Apache	
Sec. TWP-Range or Block & Survey		

Date spudded 9/24/82	Date total depth reached 9/25/82	Date completed, ready to produce	Elevation (DF, RCP, RT or Gr) feet 7833	Elevation of casing hd. range feet
Total depth 505'	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.	
Producing interval (s) for this completion		Rotary tools used (interval) To T.D.	Cable tools used (interval)	
Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed	
Type of electrical or other logs run (check logs filed with the commission)			Date filed	

## CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled

## TUBING RECORD

## LINER RECORD

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)
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## PERFORATION RECORD

## ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval

## INITIAL PRODUCTION

Date of first production      Producing method (indicate if flowing, gas lift or pumping—if pumping, show size &amp; type of pump:)

Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)

Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Geologist of the Phillips Petroleum Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date November 29, 1982

Signature Gary Gladburn

Permit No. 821

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Well Completion or Recompletion Report and Well Log

Form No. 4  
File One Copy

(Complete Reverse Side)

DETAIL OF FORMATIONS PENETRATED			
Formation	Top	Bottom	Description*
*See attached lithologic log			

**INSTRUCTIONS:**

**Attach drillers log or other acceptable log of well.**

Attach drillers log or other acceptable log of well.  
This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil and Gas Conservation Commission not later than thirty days after project completion.

**Form No. 4**

[illegible]

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER  
GEO THERMAL RESOURCES WELL  
APPLICATION TO DRILL ☒ RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS 690 N. Industrial Rd. St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE.

WELL NUMBER

ELEVATION (GROUND)

NAME OF LESSOR

USDA - Forest Service

A-4

7833'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY

DEDICATION  
(COMPLY WITH RULE G-105)

1000'E 2050'S fr NW cor. Sec. 35

T8N-R30E Sec. 35 SE SW NW

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

COUNTY

Temperature gradient well

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

BOND STATUS

ORGANIZATION REPORT

FILING FEE OF \$25.00

AMOUNT

ON FILE

OR ATTACHED

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

8-5-82

DATE

PERMIT NUMBER: 821

APPROVAL DATE: 8-10-82

APPROVED BY: R. G. yfana

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THUS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. G-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SHOW ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES \_\_\_\_\_ NO \_\_\_\_\_. IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T8N-R30E Sec. 35

CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
Name	<i>Harry Chadburn</i>
Position	Geologist
Company	Phillips Petroleum
Date	8-5-82
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

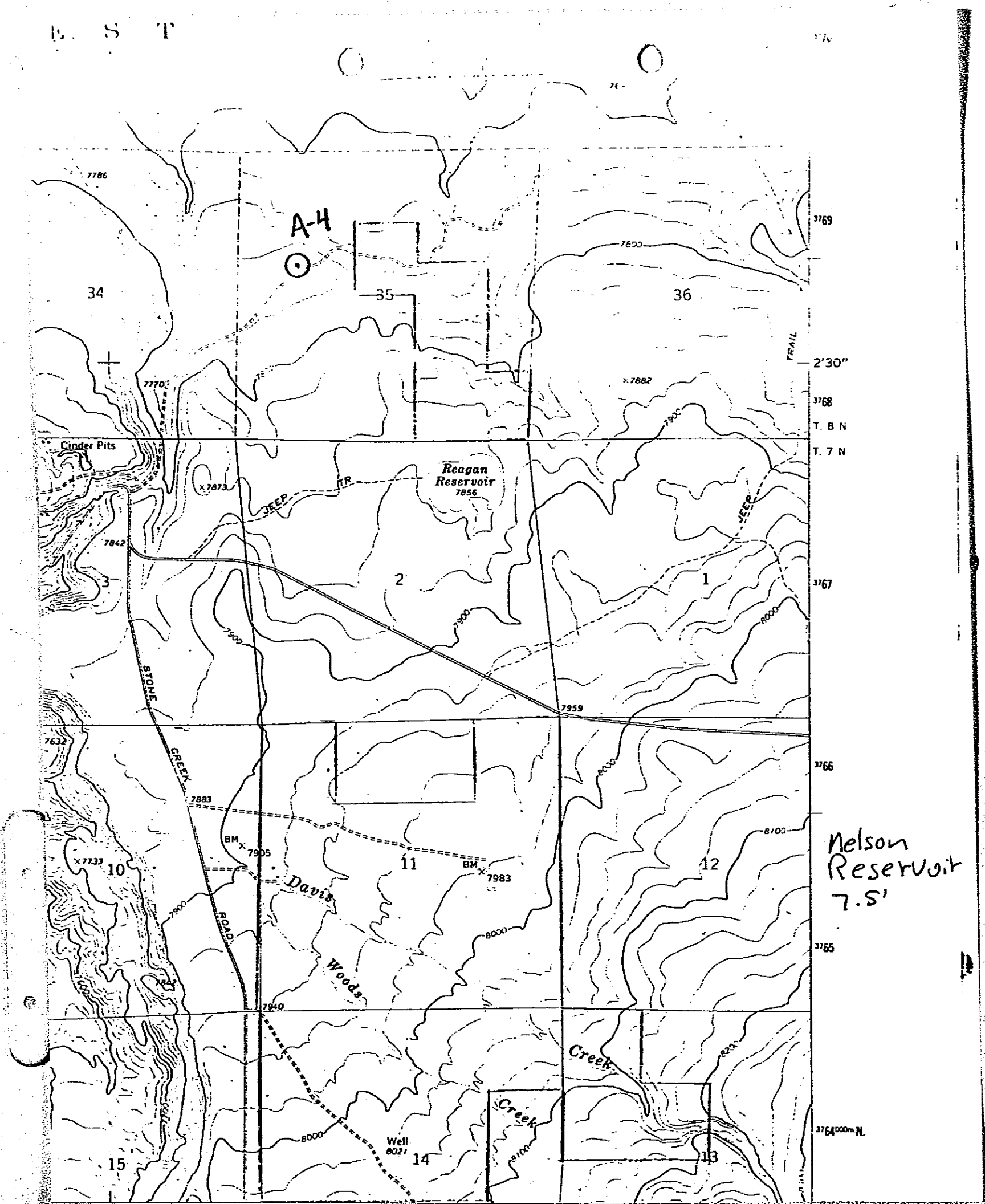
  

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe filled with water. Measure temperature thereon. Plug and abandon within 2 years.					Plugged at bottom and	

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe filled with water. Measure temperature thereon. Plug and abandon within 2 years.					Plugged at bottom and	

E. S. T.







## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-4 FEDERAL

(WELL NAME)

located 2050' FROM NORTH LINE & 1000' FROM WEST LINE (SE SW NW)

Section 35 Township 8 NORTH Range 30 EAST, APACHE County, Arizona.

The NA of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 1982.

OIL AND GAS CONSERVATION COMMISSION

By

R. G. Zytana  
EXECUTIVE SECRETARY

PERMIT N° 821

RECEIPT NO. 2297

API NO. 02-001-20269

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

RECEIVED

DEC 1 1982

O &amp; G CONS. COMM.

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG																	
DESIGNATE TYPE OF COMPLETION:																	
New Well	<input checked="" type="checkbox"/>	Work-Over	<input type="checkbox"/>	Deepen	<input type="checkbox"/>	Plug Back	<input type="checkbox"/>	Same Reservoir	<input type="checkbox"/>	Different Reservoir	<input type="checkbox"/>	Oil	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Dry	<input type="checkbox"/>
DESCRIPTION OF WELL AND LEASE																	
Operator Phillips Petroleum Company					Address 655 East 4500 South, Murray, UT 84107												
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service					Well Number A-5		Field & Reservoir Temperature gradient well										
Location T.8N., R.31E., Sec. 15, SE NE SW					County Apache												
Sec. TWP-Range or Block & Survey																	
Date spudded 10/7/82		Date total depth reached 10/8/82		Date completed, ready to produce		Elevation (DF, RKB, RT or Gr.) 7394		Elevation of casing hd. Range feet									
Total depth 501'		P.B.T.D.		Single, dual or triple completion?		If this is a dual or triple completion, furnish separate report for each completion.											
Producing interval (s) for this completion					Rotary tools used (interval) To T.D.			Cable tools used (interval)									
Was this well directionally drilled?			Was directional survey made?			Was copy of directional survey filed?			Date filed								
Type of electrical or other logs run (check logs filed with the commission)								Date filed									
CASING RECORD																	
Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)																	
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled											
TUBING RECORD				LINER RECORD													
Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)										
PERFORATION RECORD				ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD													
Number per ft.	Size & type	Depth Interval		Amt. & kind of material used		Depth Interval											
INITIAL PRODUCTION																	
Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)															
Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)											
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio											
Disposition of gas (state whether vented, used for fuel or sold):																	
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Geologist</u> of the <u>Phillips Petroleum Company</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.																	
November 29, 1982			Signature <u>Gary Chadburn</u>														
822					STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 4 File One Copy												

DETAIL OF FORMATIONS PENETRATED			
Formation	Top	Bottom	Description*
*See attached lithologic log			

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.

Attach drillers log or other acceptable log of well.  
This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil and Gas Conservation Commission not later than thirty days after project completion.

C & G CONS. COMM.

Logged by Steve Burt Kern

[illegible]

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEO THERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS 690 N. Industrial Rd. St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,

WELL NUMBER

ELEVATION (GROUND)

NAME OF LESSOR

A-5

7394'

USDA - Forest Service

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY

DEDICATION  
(COMPLY WITH RULE C-105)

2620'W 1740'N fr SE cor. Sec. 15

T8N-R31E Sec. 15-SE NE SW

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

COUNTY

Temperature gradient well

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

BOND STATUS  
AMOUNT

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

8-5-82

DATE

PERMIT NUMBER:

822

APPROVAL DATE:

8-10-82

APPROVED BY:

L. G. yama

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THIS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. C-3

OPERATOR SHALL OUTLINE THE DEDICATED ACCEPE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL  
ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

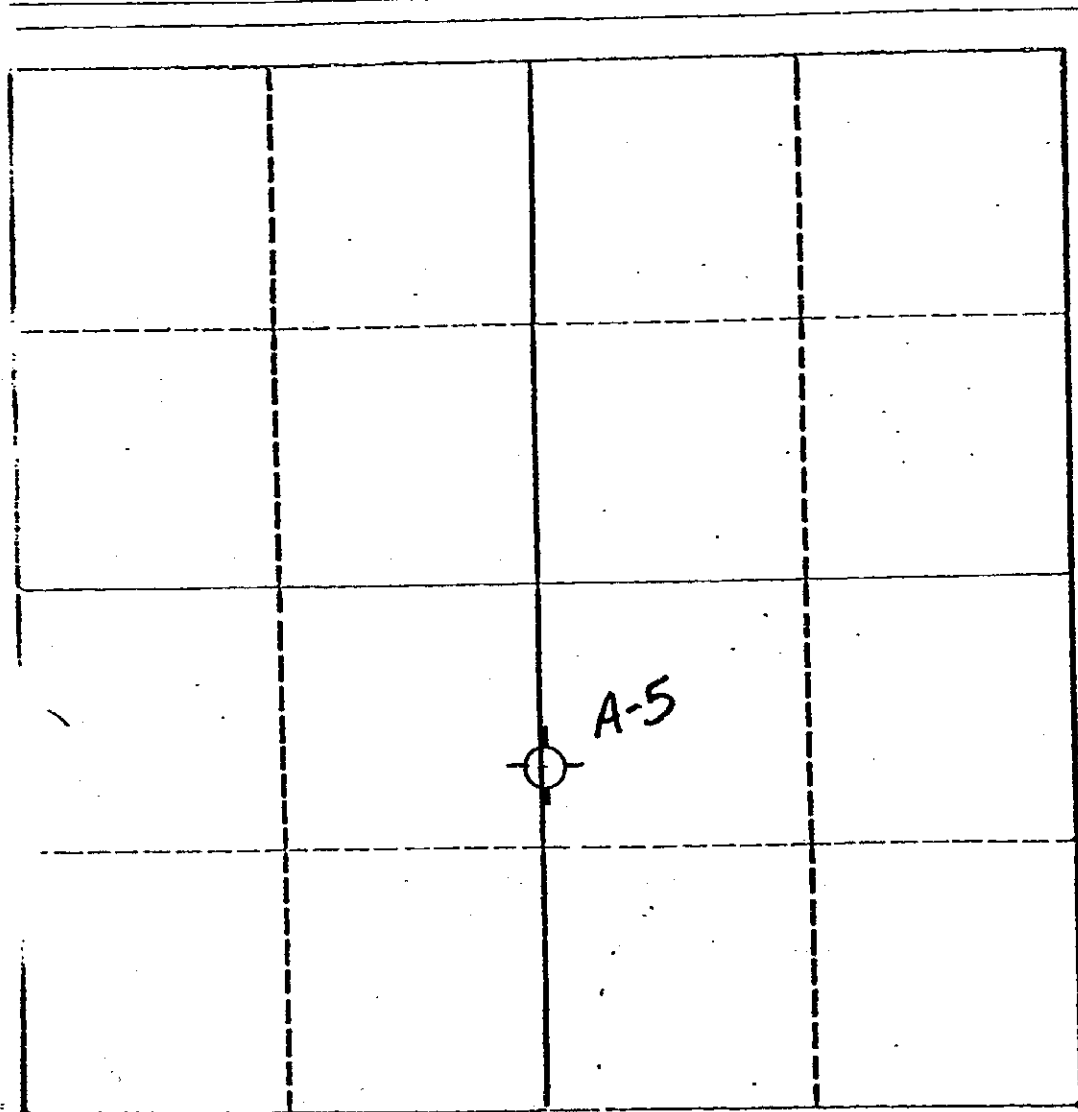
ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACCEPE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT  
OR OTHERWISE? YES \_\_\_\_\_ NO \_\_\_\_\_. IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T8N-R31E Sec. 15



#### CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name Ray Chadburn  
Position Geologist  
Company Phillips Petroleum  
Date 8-5-82

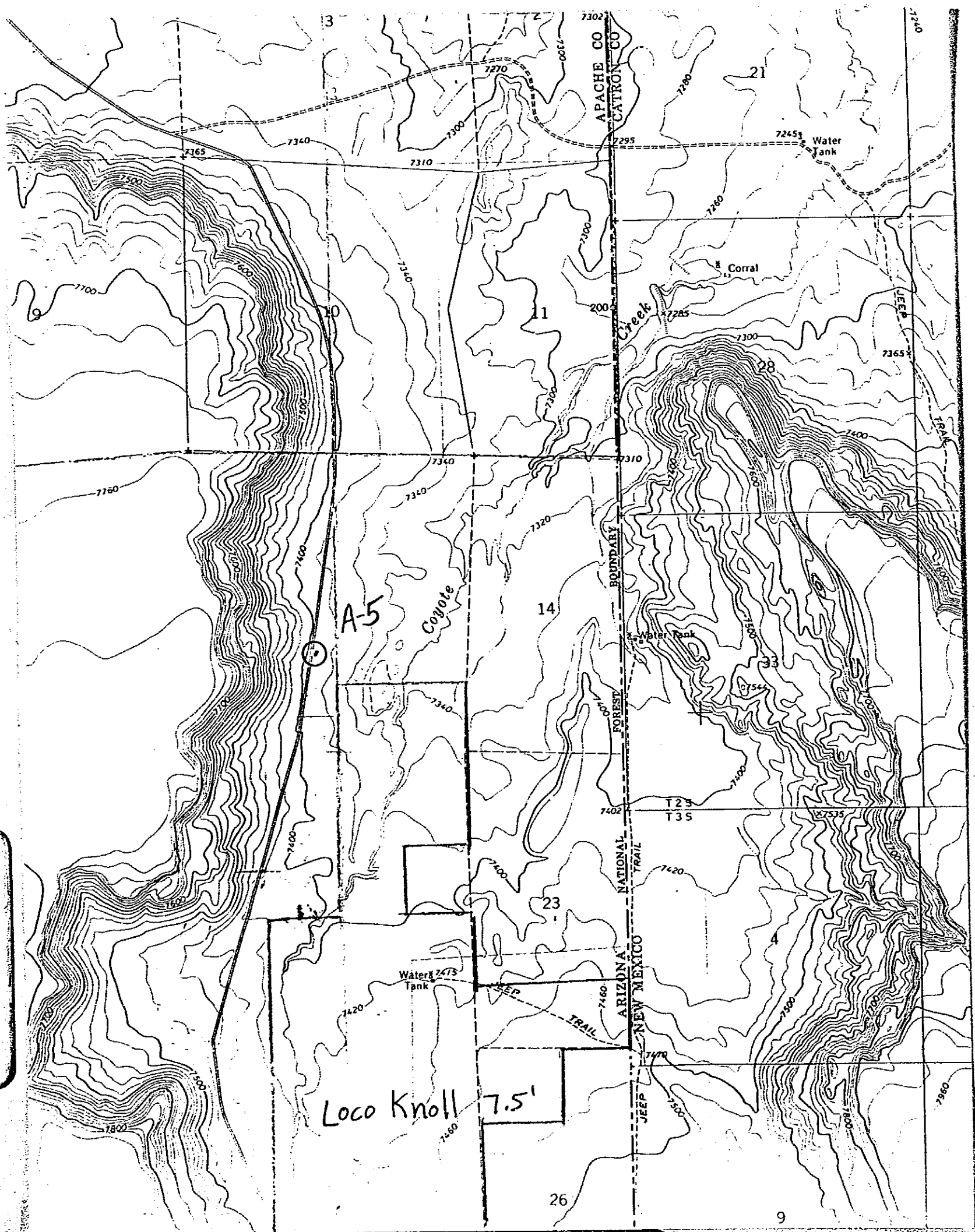
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed \_\_\_\_\_  
Registered Professional Engineer and/or Land Surveyor \_\_\_\_\_

Certificate No. \_\_\_\_\_

#### PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe filled with water. Measure temperature there in. Plug and abandon within 2 year.				to T.D.	Plugged at bottom and	





## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: **PHILLIPS PETROLEUM COMPANY**  
(OPERATOR)

to drill a well to be known as

**A-5 FEDERAL**  
(WELL NAME)

located **1740' FROM SOUTH LINE & 2620' FROM EAST LINE (SE NE SW)**

Section **15** Township **8 NORTH** Range **31 EAST**, **APACHE** County, Arizona.

The **NA** of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this **10th** day of **August**, 19**82**.

OIL AND GAS CONSERVATION COMMISSION

By **R. G. Johnson**  
EXECUTIVE SECRETARY

PERMIT N<sup>o</sup> 822

RECEIPT NO. 2297  
API NO. 02-001-20270

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27



RECEIVED

DEC 1 1982

O &amp; G CONS. COM.

## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

## DESIGNATE TYPE OF COMPLETION:

New Well ☒ Work-Over ☐ Deepen ☐ Plug Back ☐ Same Reservoir ☐ Different Reservoir ☐ Oil ☐ Gas ☐ Dry ☐

## DESCRIPTION OF WELL AND LEASE

Operator Phillips Petroleum Company	Address 655 East 4500 South, Murray, UT 84107	
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service	Well Number A-6	Field & Reservoir Temperature gradient well
Location T.7N., R.27E., Sec. 15, SE SE NE	County Apache	
Sec. TWP-Range or Block & Survey		

Date spudded 10/6/82	Date total depth reached 10/7/82	Date completed, ready to produce	Elevation (DF, RCB, RT or Gr.) 9082 feet	Elevation of casing hd. Range feet
Total depth 325'	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.	
Producing interval (s) for this completion		Rotary tools used (interval) To T.D.	Cable tools used (interval)	
Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed	
Type of electrical or other logs run (check logs filed with the commission)			Date filed	

## CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled

## TUBING RECORD

## LINER RECORD

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)

PERFORATION RECORD			ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD	
Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval

## INITIAL PRODUCTION

Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)				
Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)
Tubing pressure	Casing pressure	Cal'ed rate of Pro-duction per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the.....Geologist.....of the  
Phillips Petroleum Co.....(company), and that I am authorized by said company to make this report; and that this  
report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

November 29, 1982  
Date

Signature



Petroleum No 823

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Well Completion or Recompletion Report and Well Log

Form No. 4  
File One Copy

### DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
*See attached lithologic log			

\* Show all important zones of permeability, details of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

Form No. 4

DEC 1982

Held No. A-6  
Coordinates                     

Sheet No. \_\_\_\_\_  
Date Started \_\_\_\_\_

Collar Elevation \_\_\_\_\_  
 Total Footage 320  
 Overall Core Recovery \_\_\_\_\_  
 Logged By Steven Rust Kern

# Geologic Log

[illegible]

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEO THERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS

690 N. Industrial Rd. St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,

NAME OF LESSOR

USDA - Forest Service

WELL NUMBER

A-6

ELEVATION (GROUND)

9082'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)  
200'W 2000'S fr NE cor Sec. 15

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY  
T7N-R27E, Sec. 15 SE SE NE

DEDICATION  
(COMPLY WITH RULE G-105)

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

Temperature gradient well

COUNTY

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

GROUND STATUS

UNKNOWN

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

8-5-82

DATE

PERMIT NUMBER:

823

APPROVAL DATE:

8-10-82

APPROVED BY:

R. G. Yanna

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THUS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. C-3

- OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.
- A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SHOW ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.
- ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES ☐ NO ☐

IF THE ANSWER TO QUESTION FOUR IS "NO", HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES ☐ NO ☐ IF ANSWER IS "YES", TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T7N-R27E Sec. 15

	<b>CERTIFICATION</b> I hereby certify that the information above is true and complete to the best of my knowledge and belief.
	Name <i>Ray Chadburn</i>
	Position Geologist
	Company Phillips Petroleum
	Date 8-5-82
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed _____	
Registered Professional Engineer and/or Land Surveyor _____	
Certificate No. _____	

#### PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe filled with water. Measure temperature there in. Plug and abandon within 2 year		1" PVC	to T.D.		Plugged at bottom and	

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SIGN ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES ☐ NO ☐

IF THE ANSWER TO QUESTION FOUR IS "NO", HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES ☐ NO ☐ IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T7N-R27E Sec. 15

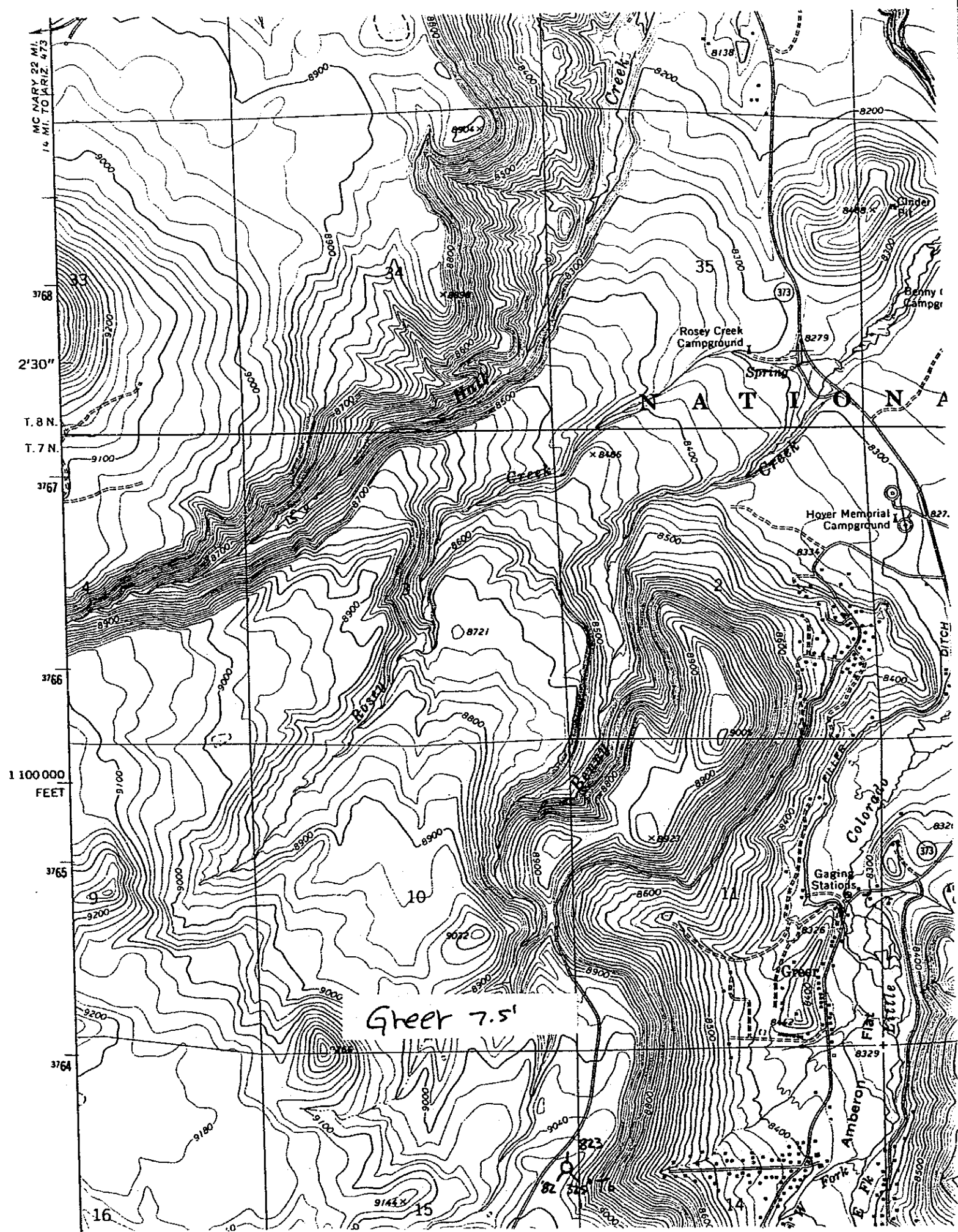
CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
Name	<i>Ray Chadburn</i>
Position	Geologist
Company	Phillips Petroleum
Date	8-5-82
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

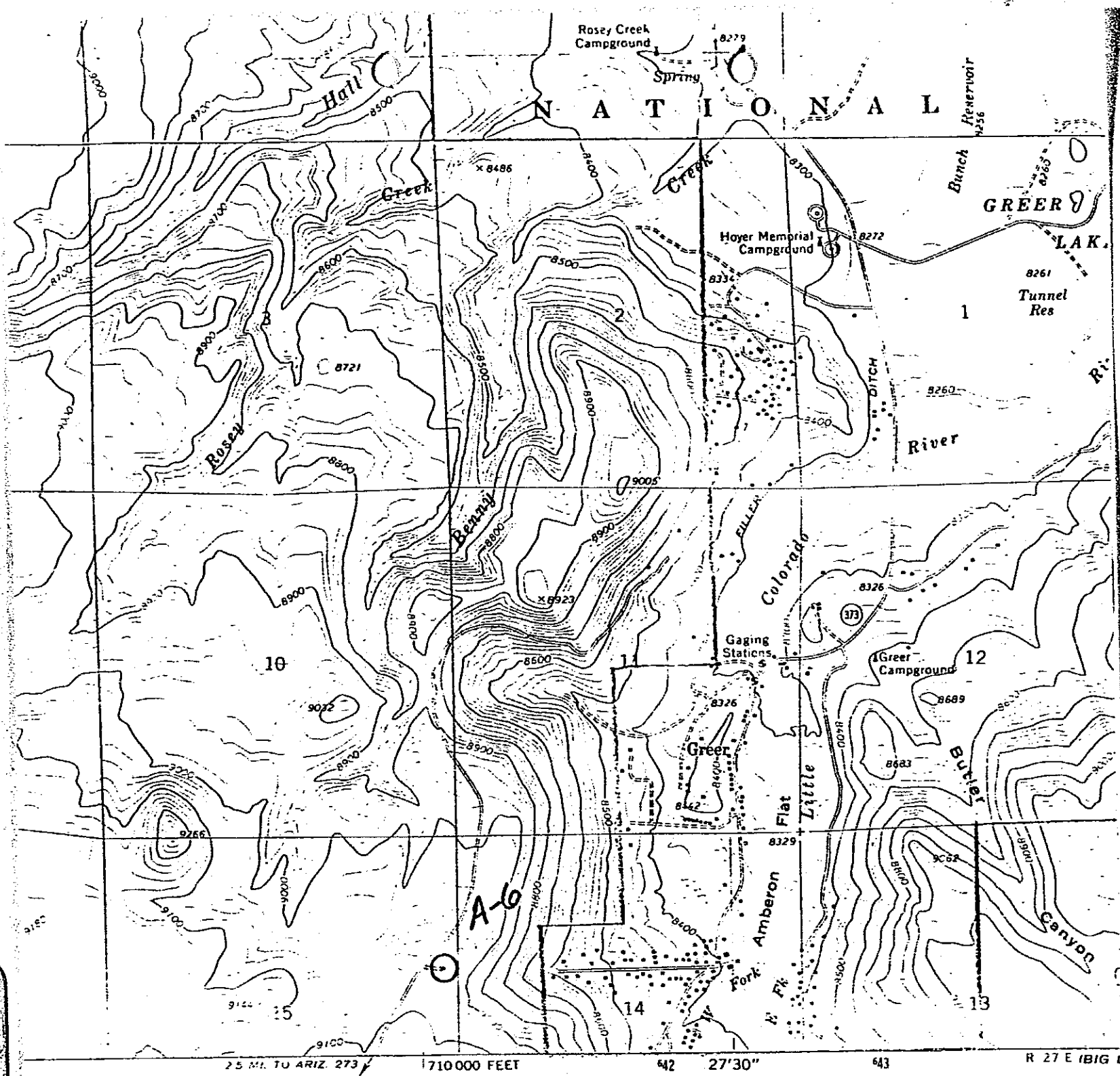
  

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D.		Install 1" PVC pipe to T.D.			Plugged at bottom and	
filled with water.						
Measure temperature thereon.						
Plug and abandon within 2 years						

PROPOSED CASING PROGRAM

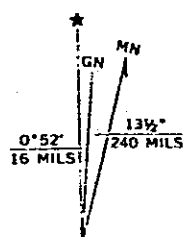
Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D.		Install 1" PVC pipe to T.D.			Plugged at bottom and	
filled with water.						
Measure temperature thereon.						
Plug and abandon within 2 years						



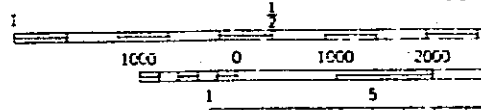


and published by the Geological Survey  
and USC&GS  
topographic methods from aerial  
1967. Field checked 1969  
n. 1927 North American datum  
based on Arizona coordinate system, east zone  
vertical Transverse Mercator grid ticks,  
blue  
lines indicate selected fence lines

Greer 7.5'



UTM GRID AND 1969 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET



CONTOUR 1  
DATUM IS

THIS MAP COMPLIES WITH N  
FOR SALE BY U. S. GEOLOGICAL SURVEY. DEN  
A FOLDER DESCRIBING TOPOGRAPHIC





## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: **PHILLIPS PETROLEUM COMPANY**  
(OPERATOR)

to drill a well to be known as

**A-6 FEDERAL**

(WELL NAME)

located **2000' FROM NORTH LINE & 220' FROM EAST LINE (SE SE NE)**

Section **15** Township **7 NORTH** Range **27 EAST**, **APACHE** County, Arizona.

The **NA** of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this **10th** day of **August**, 19 **82**.

OIL AND GAS CONSERVATION COMMISSION

By **R. G. Ybarra**  
EXECUTIVE SECRETARY

PERMIT **Nº 823**

RECEIPT NO. **2297**  
API NO. **02-001-20271**

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

RECEIVED

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG																	
DESIGNATE TYPE OF COMPLETION:																	
New Well	<input checked="" type="checkbox"/>	Work-Over	<input type="checkbox"/>	Deepen	<input type="checkbox"/>	Plug Back	<input type="checkbox"/>	Same Reservoir	<input type="checkbox"/>	Different Reservoir	<input type="checkbox"/>	Oil	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Dry	<input type="checkbox"/>
DESCRIPTION OF WELL AND LEASE																	
Operator Phillips Petroleum Co.					Address 655 East 4500 South, Murray, UT 84107												
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service					Well Number A-7		Field & Reservoir Temperature gradient well										
Location T.6N., R.31E., Sec. 4, NE NE NE					County Apache												
Sec. TWP-Range or Block & Survey																	
Date spudded 9/22/82		Date total depth reached 9/23/82		Date completed, ready to produce		Elevation (DF, RT or Gr.) 8855		Elevation of casing hd. Range		feet							
Total depth 340'		P.B.T.D.		Single, dual or triple completion?		If this is a dual or triple completion, furnish separate report for each completion.											
Producing interval (s) for this completion				Rotary tools used (interval) To T.D.				Cable tools used (interval)									
Was this well directionally drilled?		Was directional survey made?		Was copy of directional survey filed?		Date filed											
Type of electrical or other logs run (check logs filed with the commission)								Date filed									
CASING RECORD																	
Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)																	
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled											
TUBING RECORD				LINER RECORD													
Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)										
in.	ft.	ft.	in.	ft.	ft.												
PERFORATION RECORD				ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD													
Number per ft.	Size & type	Depth Interval		Am't. & kind of material used		Depth Interval											
INITIAL PRODUCTION																	
Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)															
Date of test	Hrs. tested	Choke size	Oil prod. during test	Gas prod. during test	Water prod. during test	Oil gravity											
			bbbl.	MCF	bbbl.	* API (Corr)											
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil	Gas	Water	Gas-oil ratio											
			bbbl.	MCF	bbbl.												
Disposition of gas (state whether vented, used for fuel or sold):																	
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the.....Geologist.....of the Phillips Petroleum Company.....(company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.																	
November 29, 1982 Date										Signature <i>Gary Chodurn</i>							
PERMIT NO. 824										STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 4 File One Copy							

(Complete Reverse Side)

DETAIL OF FORMATIONS PENETRATED			
Formation	Top	Bottom	Description*
* See attached lithologic log			

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.

Form No. 4

O &amp; G CONS. COMM.

A-7

12

# Not Just

**Date Started**

**Date Completed**

PHILLIPS PETROLEUM CO.

Alpine, Arizona

### Collar Elevation

**Total Footage** 340

### Overall Core Recovery:

Logged By Steven Beert Hess

# GEOLGIC LOG

[illegible]

APPLICATION FOR PERMIT TO DRILL OR RE-ENTER  
GEOTHERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS 690 N. Industrial Rd. St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,

NAME OF LESSOR

USDA - Forest Service

WELL NUMBER

A-7

ELEVATION (GROUND)

8855'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)  
685'W 65'S fr NE cor Sec. 4

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY  
T6N-R31E, Sec. 4 NE NE NE

DEDICATION  
(COMPLY WITH RULE G-105)

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

Temperature gradient well

COUNTY

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

WELL STATUS

WELL

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

8-5-82

DATE

PERMIT NUMBER:

824

EXPIRATION DATE:

8-10-82

APPROVED BY:

R. A. - yfana

NOTICE:

BEFORE SENDING IN THIS FORM RESURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ANCE WILL THUS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. G-3

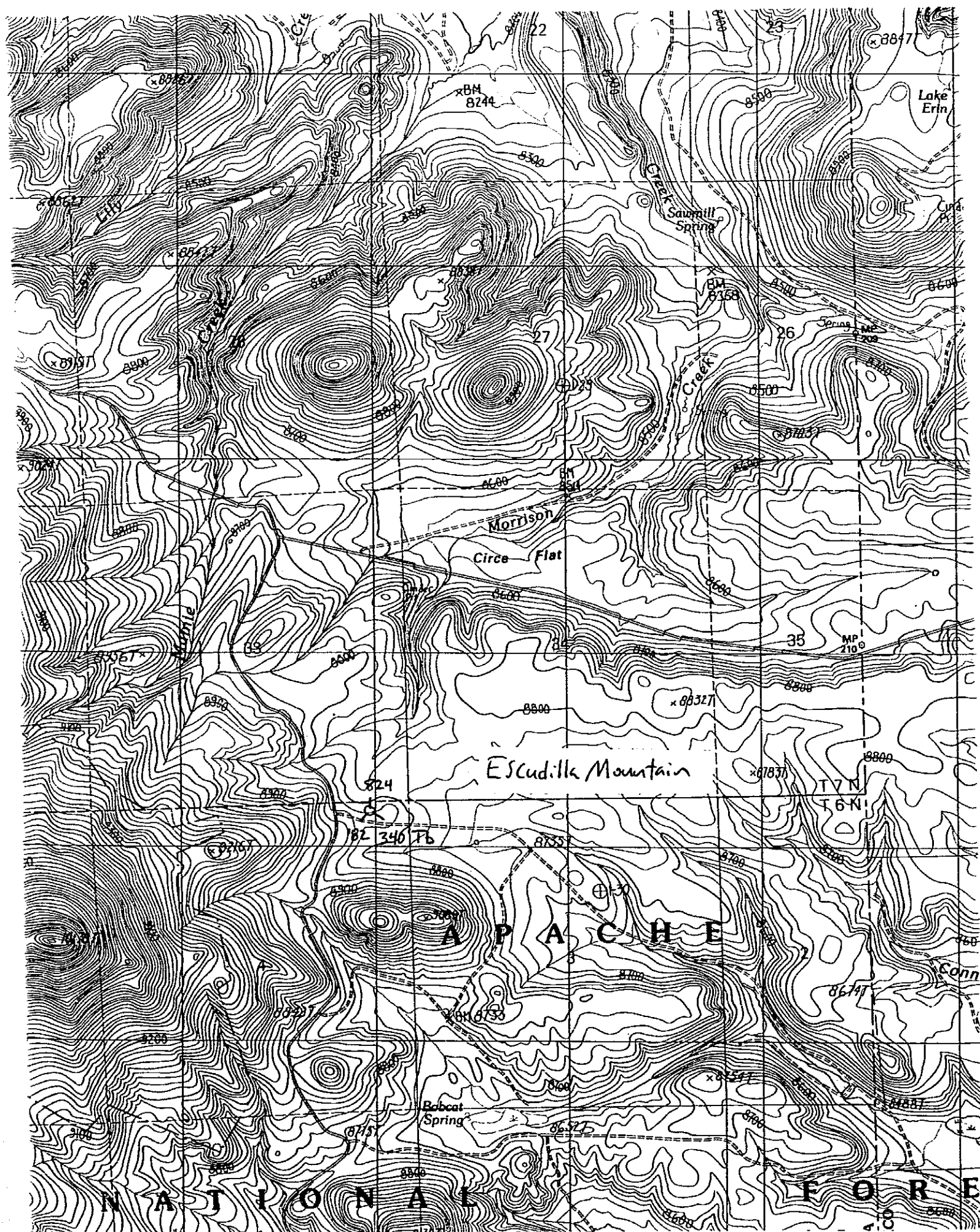
• A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL  
 : . ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

## PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. Plugged at bottom and filled with water.						
Measure temperature there in.						
Plug and abandon within 2 year.						



This is a detailed topographic map of the Fort Huachuca region, showing the border between the United States and Mexico. The map includes various geographical features such as Skunk Flat, Mud Spring, Lake Erin, Miller Scott Spring, and several peaks and ridges. A circled area labeled 'A-7' is located near the border. The map is overlaid with a grid of latitude and longitude coordinates. The map is titled 'FORT HUACHUCA' and 'ARIZONA' and 'MEXICO'.





## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-7 FEDERAL

(WELL NAME)

located 65' FROM NORTH LINE & 685' FROM EAST LINE (NE NE NE)

Section 4 Township 6 NORTH Range 31 EAST, APACHE County, Arizona.

The NA of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 19 82.

OIL AND GAS CONSERVATION COMMISSION

By R. G. [Signature]  
EXECUTIVE SECRETARY

PERMIT N<sup>o</sup> 824

RECEIPT NO. 2297

API NO. 02-001-20272

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

RECEIVED

DEC 1 1982

O &amp; G CONS. COMM

WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG																	
DESIGNATE TYPE OF COMPLETION:																	
New Well	<input checked="" type="checkbox"/>	Work-Over	<input type="checkbox"/>	Deepen	<input type="checkbox"/>	Plug Back	<input type="checkbox"/>	Same Reservoir	<input type="checkbox"/>	Different Reservoir	<input type="checkbox"/>	Oil	<input type="checkbox"/>	Gas	<input type="checkbox"/>	Dry	<input type="checkbox"/>
DESCRIPTION OF WELL AND LEASE																	
Operator Phillips Petroleum Company					Address 655 East 4500 South, Murray, UT 84107												
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service					Well Number A-8		Field & Reservoir Temperature gradient well										
Location T.6N., R.29E., Sec. 36, SE SE NE					County Apache												
Sec. TWP-Range or Block & Survey																	
Date spudded 9/18/82		Date total depth reached 9/20/82		Date completed, ready to produce		Elevation (DF, RCP, RT or Gr.) 8890		Elevation of casing hd. Range feet									
Total depth 425'		P.B.T.D.		Single, dual or triple completion?		If this is a dual or triple completion, furnish separate report for each completion.											
Producing interval (s) for this completion					Rotary tools used (interval) To T.D.			Cable tools used (interval)									
Was this well directionally drilled?			Was directional survey made?			Was copy of directional survey filed?			Date filed								
Type of electrical or other logs run (check logs filed with the commission)								Date filed									
CASING RECORD																	
Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)																	
Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled											
TUBING RECORD				LINER RECORD													
Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)										
PERFORATION RECORD				ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD													
Number per ft.	Size & type	Depth Interval		Am't. & kind of material used				Depth Interval									
INITIAL PRODUCTION																	
Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)															
Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)											
Tubing pressure	Casing pressure	Cal'd rate of Pro- duction per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio											
Disposition of gas (state whether vented, used for fuel or sold):																	
CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the <u>Geologist</u> of the <u>Phillips Petroleum Company</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.																	
November 29, 1982 Date										Signature <i>Gary G. Gaddum</i>							
Permit No. 825				STATE OF ARIZONA OIL & GAS CONSERVATION COMMISSION Well Completion or Recompletion Report and Well Log Form No. 6 File One Copy													

(Complete Reverse Side)

DETAIL OF FORMATIONS PENETRATED			
Formation	Top	Bottom	Description*
*See attached lithologic log			

**INSTRUCTIONS:**

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

**Form No. 4**

Leland B. Stevens

## SECTION 1375

FROM	TO	FT. OF CORE	TYPE	ROCK DESCRIPTION, ALTERATION AND REMARKS
0				Sandstone, Medium brown, 40% Feldspar, 30% Volcanics, 10% Augite & Ferro-magnetite minerals, 20% Quartz
60	80			Basalt, Sandstone, Tuff
80				Basalt, Dark gray, vesicular, with 15% Goethite, 30% Tuff, pale yellow gray
140	140			Basalt, Dark gray, vesicular, with Augite phenocrysts, Plagioclase microcrysts, & minor goethite
220	420			Basalt, Dark gray, with phenocrysts of Augite and Labradorite, hematitic alteration of Olivine.

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEO THERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Co.

ADDRESS 690 N. Industrial Rd., St. George, UT 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,  
NAME OF LESSOR

USDA Forest Service

WELL NUMBER

A-8

ELEVATION (GROUND)

8890'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE NAME  
WELLS DRILLED, FROM WHOM PURCHASED:

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)  
250' W 2587' S fr NE cor. Sec. 36

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY  
T.6N., R29E., Sec. 36, SE,SE,NE

DEDICATION  
(COMPLY WITH RULE G-105)

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)  
Temperature gradient well

COUNTY

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

BOND STATUS  
AMOUNT

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY). AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT:  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

August 5, 1982  
DATE

PERMIT NUMBER: 825

APPROVAL DATE: 8-10-82

APPROVED BY: R. G. yfana

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THUS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. G-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL  
ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT  
OR OTHERWISE? YES \_\_\_\_\_ NO \_\_\_\_\_. IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T. 6 N., R. 29 E., Sec. 36

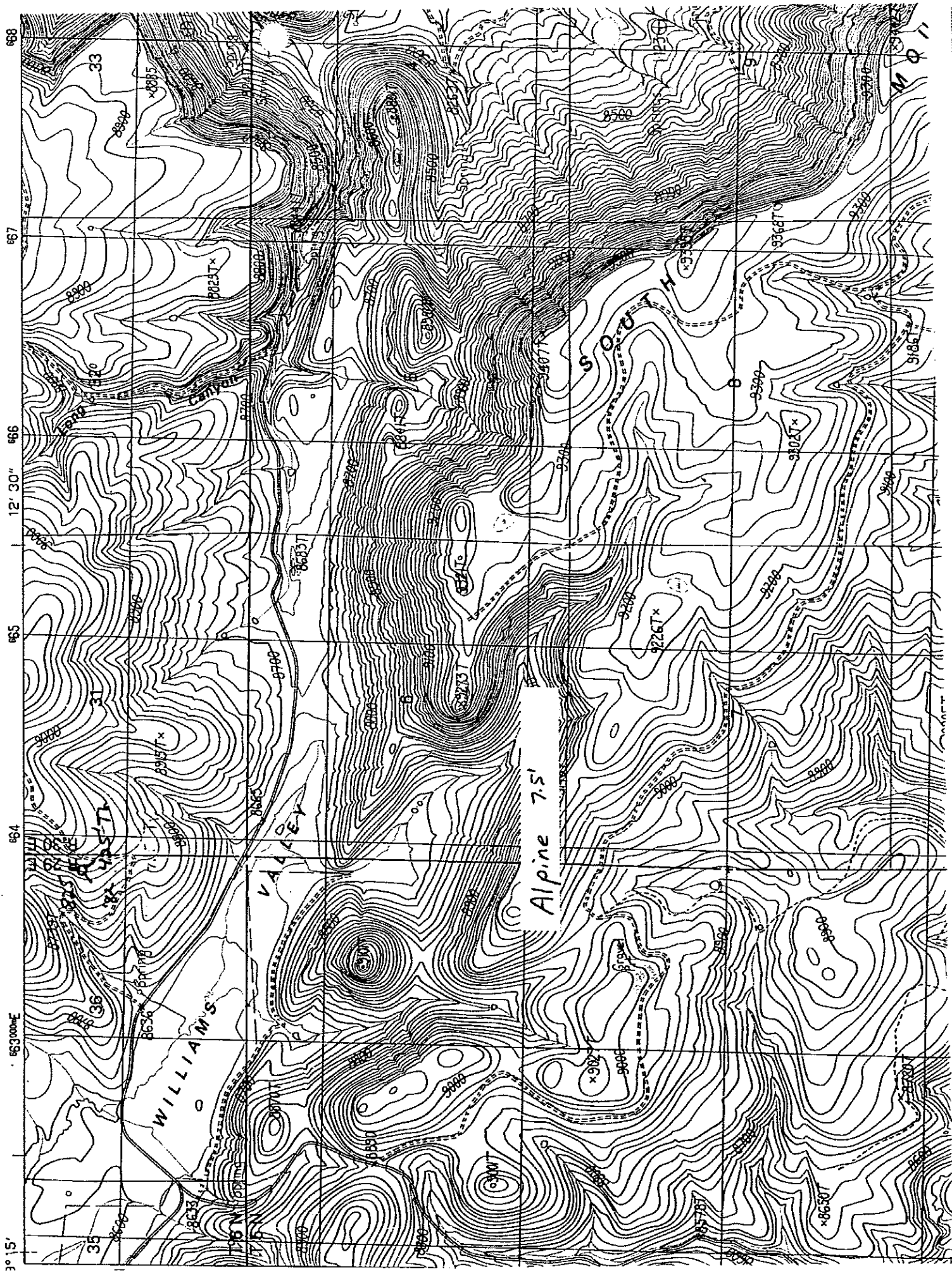
CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
Name	<i>Gary Chadburn</i>
Position	Geologist
Company	Phillips Petroleum
Date	August 5, 1982
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

PROPOSED CASING PROGRAM						
Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. Plugged at bottom and filled with water.						
Measure temperature thereon.						
Plug and abandon within one year.						

A-8  
1

UNITED STATES OF AMERICA  
GEOLOGICAL SURVEY





## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-8 FEDERAL  
(WELL NAME)

located 2587' FROM NORTH LINE & 250' FROM EAST LINE (SE SE NE)

Section 36 Township 6 NORTH Range 29 EAST, APACHE County, Arizona.

The NA of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 19 82.

OIL AND GAS CONSERVATION COMMISSION

By R. G. [Signature]  
EXECUTIVE DIRECTOR

PERMIT 00325

RECEIPT NO. 2297

A.P.I. NO. 02-001-20273

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27



RECEIVED

DEC 1 1982

## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

O &amp; G CONS. COMM.

New Well ☒ Work-Over ☐ Deepen ☐ Plug Back ☐ Same Reservoir ☐ Different Reservoir ☐ Oil ☐ Gas ☐ Dry ☐

## DESCRIPTION OF WELL AND LEASE

Operator Phillips Petroleum Company	Address 655 East 4500 South, Murray, UT 84107	
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service	Well Number A-9	Field & Reservoir Temperature gradient well
Location T.5N., R.31E., Sec. 5, NE NW SE	County Apache	
Sec. TWP-Range or Block & Survey		

Date spudded 9/20/82	Date total depth reached 9/22/82	Date completed, ready to produce	Elevation (Top of Hole, RT or Grd) feet 8310	Elevation of casing hd. Range feet
Total depth 345'	P.E.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.	
Producing interval (s) for this completion		Rotary tools used (interval) To T.D.	Cable tools used (interval)	
Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed	
Type of electrical or other logs run (check logs filed with the commission)			Date filed	

## CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled

## TUBING RECORD

## LINER RECORD

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)

## PERFORATION RECORD

## ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth interval	Amt. & kind of material used	Depth interval

## INITIAL PRODUCTION

Date of first production      Producing method (indicate if flowing, gas lift or pumping—if pumping, show size &amp; type of pump:)

Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)

Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Geologist of the Phillips Petroleum Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Date November 29, 1982Signature Gary Gladwin

Permit No.

826

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION  
Well Completion or Recompletion Report and Well Log  
Form No. 4  
File One Copy

(Complete Reverse Side)

DETAIL OF FORMATIONS PENETRATED			
Formation	Top	Bottom	Description*
*See attached lithologic log			

**INSTRUCTIONS:**

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

**Form No. 4**

200

**Confidential**

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Date Started \_\_\_\_\_

**Date Completed**

PHILLIPS PETROLEUM CO.

Alaine, Arizona

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Date Started:

**Date Completed**

### Collar Elevation

**Total Footage** 340

### Overall Core Recovery -

Logged By Steve Gust Kern

# GEOLOGIC LOG

SECTION DEPTH		METALLIZATION		ROCK DESCRIPTION, ALTERATION AND REMARKS		TYPE		FT. OF CORE		TO	
0				Sandstone, medium brown, 40% Feldspar, 30% Volcanics, 20% Quartz, 10% Augite & Ferro-magnesian minerals. Poorly cemented, moderate FeOx staining							
60				Tuff, white to pale green, with 15% Basalt fragments							
80				70% Basalt, dark gray with plagioclase phenocrysts, 30% Tuff, white to pale green.							
100				Andesite, dark gray to dark brown, porphyritic texture. Phenocrysts of Plagioclase, microcrysts of Augite, coats of Hematite, minor amounts of a green mineral (Celadonite) & magnetite.							
				Basalt, dark gray, and Tuff, pinkish brown							
280											
340											

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEO THERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR  
Southwest Drilling Co.

ADDRESS 690 N. Industrial Rd., St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,  
NAME OF LESSOR

USDA - Forest Service

WELL NUMBER

A-9

ELEVATION (GROUND)

8310'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)  
1940'W 2798'S fr NE cor. Sec. 5

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY  
T5N., R.31E., Sec. 5, NE,NW,SE

DEDICATION  
(COMPLY WITH RULE G-105)

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

Temperature gradient well

COUNTY

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START  
September 1, 1982

BOND STATUS  
AMOUNT

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00  
ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

August 5, 1982

DATE

PERMIT NUMBER:

826

APPROVAL DATE:

8-10-82

APPROVED BY:

R. G. yama

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THUS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. C-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESOURCES WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SHOW ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES \_\_\_\_\_ NO \_\_\_\_\_. IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T. 5 N., R. 31 E., Sec. 5

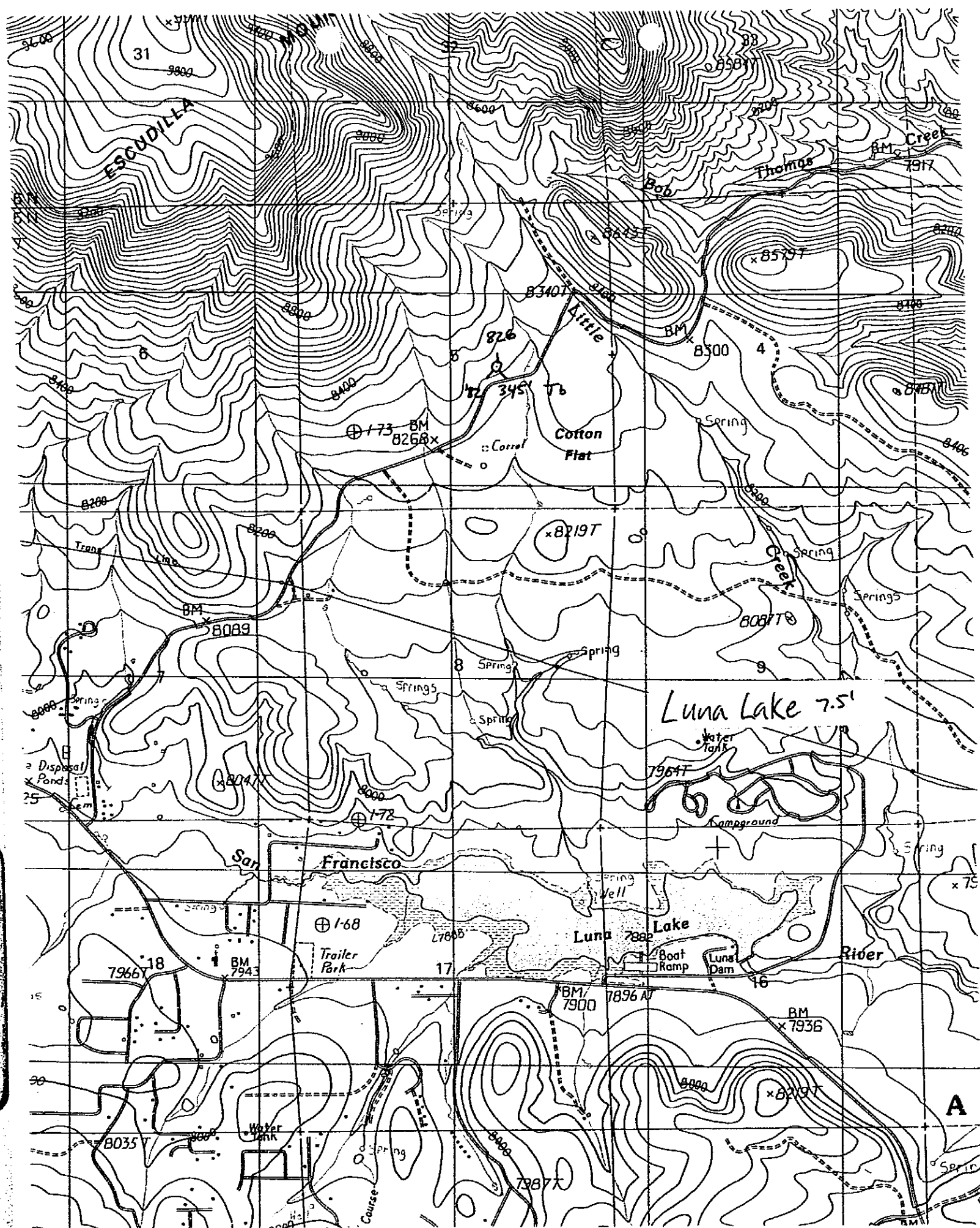
CERTIFICATION	
I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
Name	<i>Gay Chadburn</i>
Position	Geologist
Company	Phillips Petroleum.
Date	August 5, 1982
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed	
Registered Professional Engineer and/or Land Surveyor	
Certificate No.	

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. filled with water. Measure temperature there in. Plug and abandon within 2 year.					Plugged at bottom and	

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. filled with water. Measure temperature there in. Plug and abandon within 2 year.					Plugged at bottom and	





## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-9 FEDERAL  
(WELL NAME)

located 2798' FROM NORTH LINE & 1940' FROM EAST LINE (NE NW SE)

Section 5 Township 5 NORTH Range 31 EAST, APACHE County, Arizona.

The NA of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 19 82.

OIL AND GAS CONSERVATION COMMISSION

By [Signature]  
EXECUTIVE DIRECTOR

PERMIT 00826

RECEIPT NO. 2297

A.P.I. NO. 02-001-20274

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

RECEIVED

DEC 1 1982

O &amp; G CONS. COMM.

## WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

DESIGNATE TYPE OF COMPLETION:

New Well ☒ Work-Over ☐ Deepen ☐ Plug Back ☐ Same Reservoir ☐ Different Reservoir ☐ Oil ☐ Gas ☐ Dry ☐

## DESCRIPTION OF WELL AND LEASE

Operator Phillips Petroleum Company	Address 655 East 4500 South, Murray, UT 84107	
Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service	Well Number A-10	Field & Reservoir Temperature gradient well
Location T.5N., R.30E., Sec. 22, SE SE SE	County Apache	
Sec. TWP-Range or Block & Survey		

Date spudded 9/16/82	Date total depth reached 9/18/82	Date completed, ready to produce	Elevation (DF, RKE, RT or Gr.) 8730	Elevation of casing hd. Range feet
Total depth 505'	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.	
Producing interval (s) for this completion		Rotary tools used (interval) To T.D.	Cable tools used (interval)	
Was this well directionally drilled?		Was directional survey made?	Was copy of directional survey filed?	Date filed
Type of electrical or other logs run (check logs filed with the commission)				Date filed

## CASING RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled

## TUBING RECORD

## LINER RECORD

Size in.	Depth set ft.	Packer set at ft.	Size in.	Top ft.	Bottom ft.	Sacks cement	Screen (ft.)

## PERFORATION RECORD

## ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

Number per ft.	Size & type	Depth Interval	Amt. & kind of material used	Depth Interval

## INITIAL PRODUCTION

Date of first production		Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)				
Date of test	Hrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)
Tubing pressure	Casing pressure	Cal'd rate of Production per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Geologist of the Phillips Petroleum Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

November 29, 1982  
Date

Signature



Permit No.

827

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

Well Completion or Recompletion Report and Well Log

Form No. 4

File One Copy

(Complete Reverse Side)



### DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
*See attached lithologic log			

\* Show all important zones of permeability, details of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.

This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

## REGION NORTH

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEOTHERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Company

ADDRESS 690 N. Industrial Rd., St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,

WELL NUMBER

ELEVATION (GROUND)

NAME OF LESSOR

USDA - Forest Service

A-10

8730'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY

DEDICATION  
(COMPLY WITH RULE C-105)

595' N 555' W fr SE cor. Sec. 22

T.5N., R.30E., Sec. 22, SE, SE, SE,

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

COUNTY

Temperature gradient well

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

BOND STATUS  
AMOUNT

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

August 5, 1982

DATE

PERMIT NUMBER:

827

APPROVAL DATE:

8-10-82

APPROVED BY:

R. G. yfana

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THIS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. C-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESERVOIR WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL LOCATE ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

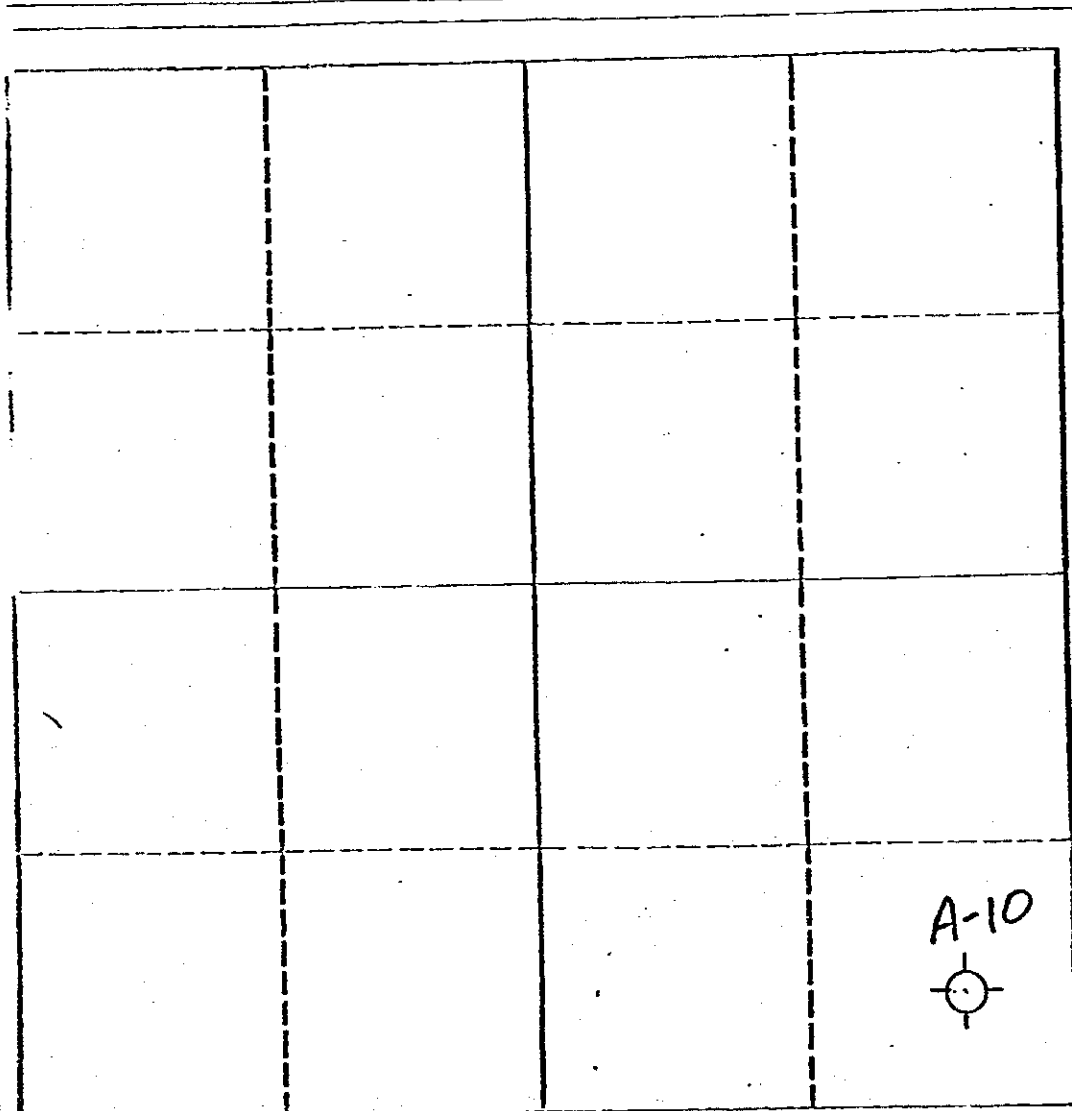
ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES \_\_\_\_\_ NO \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AND OTHERWISE? YES \_\_\_\_\_ NO \_\_\_\_\_. IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T. 5 N., R. 30 E., Sec. 22



#### CERTIFICATION

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name Ray Chadwick  
Position Geologist  
Company Phillips Petroleum  
Date August 5, 1982

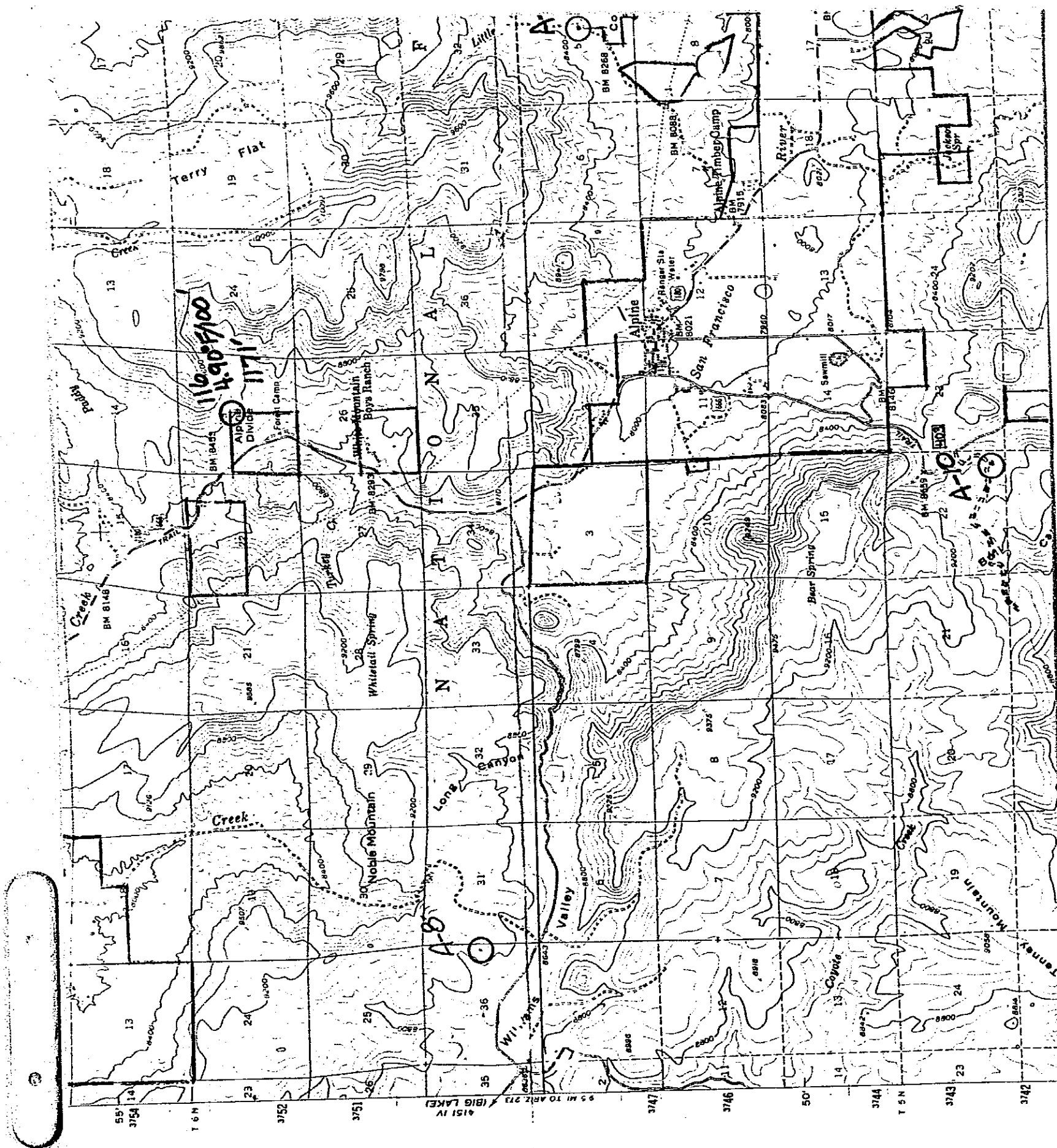
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

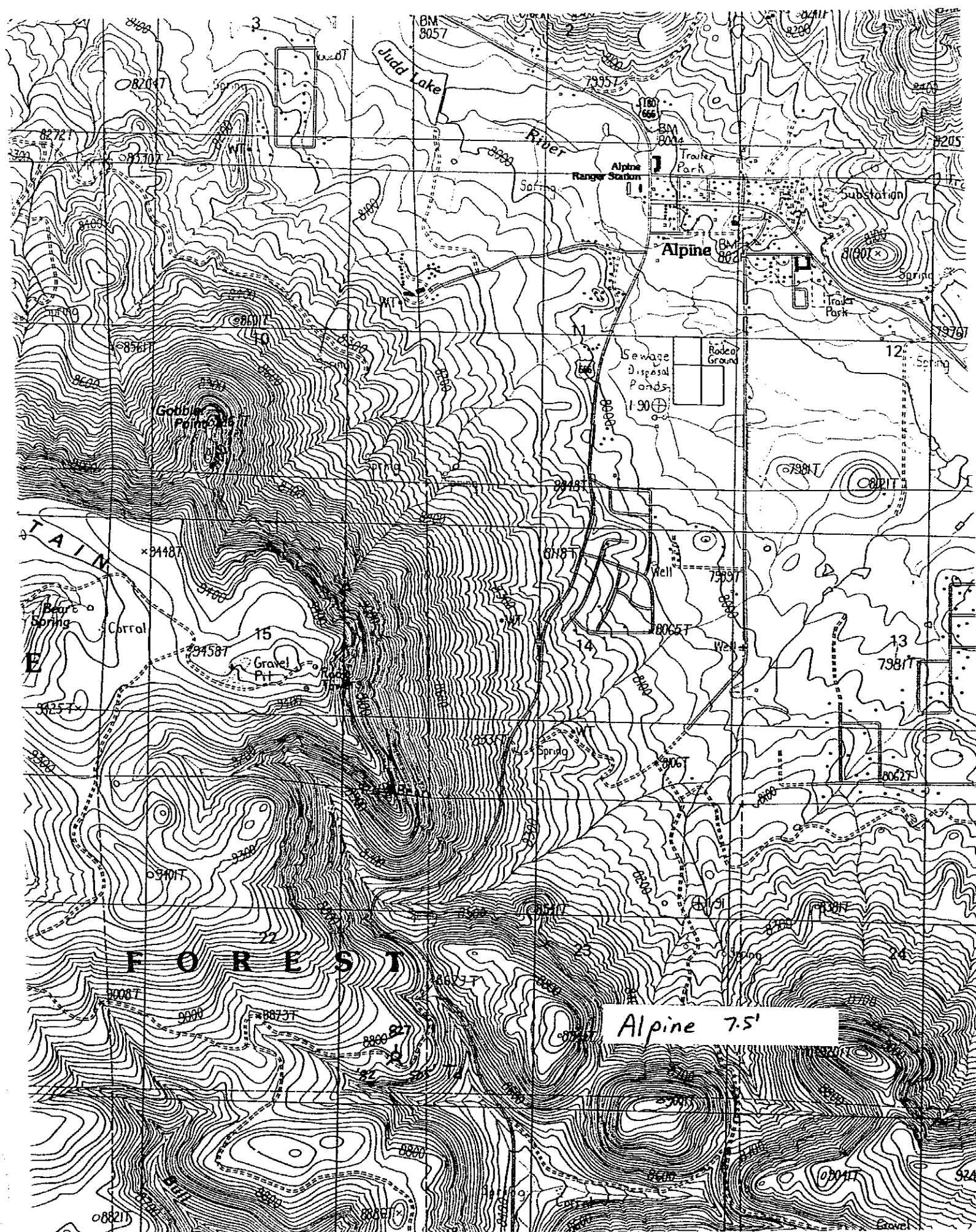
Date Surveyed \_\_\_\_\_  
Registered Professional Engineer and/or Land Surveyor \_\_\_\_\_

Certificate No. \_\_\_\_\_

#### PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe to T.D. filled with water. Measure temperature therein.					Plugged at bottom and	







## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-10 FEDERAL

(WELL NAME)

located 595' FROM SOUTH LINE & 555' FROM EAST LINE (SE SE SE)

Section 22 Township 5 NORTH Range 30 EAST, APACHE County, Arizona.

The NA of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 19 82.

OIL AND GAS CONSERVATION COMMISSION

By [Signature]  
EXECUTIVE DIRECTOR

PERMIT 00827

RECEIPT NO. 2297

A.P.I. NO. 02-001-20275

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

DEC 1 1982

## G &amp; G CONS. COMM.

**DESIGNATE TYPE OF COMPLETION:**

**DESCRIPTION OF WELL AND LEASE**

<b>Operator</b> Phillips Petroleum Company	<b>Address</b> 655 East 4500 South, Murray, UT 84107
---	---

Federal, State or Indian Lease Number or name of lessor if fee lease USDA - Forest Service	Well Number A-11	Field & Reservoir Geothermal gradient well
---	---------------------	---

Location	County
T.5N., R.31E., Sec. 34, SW SW SW	Apache

Sec. TWP-Range or Block &amp; Survey

Date spudded 9/14/82	Date total depth reached 9/16/82	Date completed, ready to produce	Elevation (DF, RAB, RT or Gr.) 7715 feet	Elevation of casing hd. range feet
-------------------------	-------------------------------------	----------------------------------	--	--

Total depth 480'	P.B.T.D.	Single, dual or triple completion?	If this is a dual or triple completion, furnish separate report for each completion.
---------------------	----------	------------------------------------	--

Producing interval (s) for this completion	Rotary tools used (interval) To T.D.	Cable tools used (interval)
--	---	-----------------------------

Was this well directionally drilled?	Was directional survey made?	Was copy of directional survey filed?	Date filed
--------------------------------------	------------------------------	---------------------------------------	------------

Type of electrical or other logs run (check logs filed with the commission)	Date filed
---	------------

### CASINO RECORD

Casing (report all strings set in well—conductor, surface, intermediate, producing, etc.)

Purpose	Size hole drilled	Size casing set	Weight (lb./ft.)	Depth set	Sacks cement	Amt. pulled

### TUBING RECORD

Size	Depth set	Packer set at	Size	Top	Bottom	Sacks cement	Screen (ft.)
in.	ft.	ft.	in.	ft.	ft.		

### PERFORATION RECORD

Number per ft.	Size & type	Depth Interval	Am't. & kind of material used	Depth Interval

**INITIAL PRODUCTION**

Date of first production	Producing method (indicate if flowing, gas lift or pumping—if pumping, show size & type of pump:)
--------------------------	---

Date of test	Mrs. tested	Choke size	Oil prod. during test bbls.	Gas prod. during test MCF	Water prod. during test bbls.	Oil gravity ° API (Corr)
Tubing pressure	Casing pressure	Cal'd rate of Pro- duction per 24 hrs.	Oil bbls.	Gas MCF	Water bbls.	Gas-oil ratio

Disposition of gas (state whether vented, used for fuel or sold):

CERTIFICATE: I, the undersigned, under the penalty of perjury, state that I am the Geologist of the Phillips Petroleum Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

November 29, 1982

Date \_\_\_\_\_

**Signature**

**STATE OF ARIZONA**  
**OIL & GAS CONSERVATION COMMISSION**  
Well Completion or Recompletion Report and Well Log  
File One Copy

Period No.

828

Form No. 4

**File One Copy**

(Complete Reverse Side)



DETAIL OF FORMATIONS PENETRATED			
Formation	Top	Bottom	Description*
*See attached lithologic log			

**INSTRUCTIONS:**

Attach drillers log or other acceptable log of well.  
This Well Completion or Recompletion report and well log shall be filed with the State of Arizona Oil & Gas Conservation Commission not later than thirty days after project completion.

**Form No. 4**

C &amp; G CONS. COMM.

Holo No. A-11  
Coordinates \_\_\_\_\_

PHILLIPS PETROLEUM CO.

CRIMINAL DIVISION  
Total Footage 480  
Overall Core Recovery  
Logged By Station Point Herr

**2015**

**Date Started** \_\_\_\_\_ Alpine, Az.

Date Completed\_\_\_\_\_

# GEOLOGIC LOG

GEOLOGIC LOG							SECTION DEPTH	
ROCK DESCRIPTION, ALTERATION AND REMARKS							METALLIZATION	
FROM	TO	FT. OF CORE	TYPE					
0				Alluvium & Fluvial Material, composed of Sandstone, Mudstone, Andesite, & Tuff				
20	20			50% Medium brown Andesite & 50% Red brown Tuff				
40	40			Andesite, medium brown to medium pink-gray color, porphyritic texture, with phenocrysts of Plagioclase, micocrysts of Apatite, occasional casts & staining of Hematite, minor amounts of a green mineral (Celadonite?)				
400	400			Andesite, medium green-brown, Bleached Zone, Plagioclase partially altered.				
460	480			60% Dark gray Basalt & 40% Bleached Andesite.				

# APPLICATION FOR PERMIT TO DRILL OR RE-ENTER GEOTHERMAL RESOURCES WELL

APPLICATION TO DRILL ☒

RE-ENTER OLD WELL ☐

NAME OF COMPANY OR OPERATOR

Phillips Petroleum Company

ADDRESS 655 E 4500 S

Salt Lake City

Utah STATE

DRILLING CONTRACTOR

Southwest Drilling Company

ADDRESS 690 N. Industrial Rd., St. George, Utah 84770

DESCRIPTION OF WELL AND LEASE

FEDERAL, STATE OR INDIAN LEASE NUMBER, OR IF FEE LEASE,  
NAME OF LESSOR

USDA - Forest Service

WELL NUMBER

A-11

ELEVATION (GROUND)

7715'

NEAREST DISTANCE FROM PROPOSED LOCATION  
TO PROPERTY OR LEASE LINE:

FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING,  
COMPLETED OR APPLIED-FOR WELL ON THE SAME LEASE:

FEET

NUMBER OF ACRES IN LEASE:

NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL,  
COMPLETED IN OR DRILLING TO THIS RESERVOIR:

IF LEASE, PURCHASED WITH ONE OR MORE  
WELLS DRILLED, FROM WHOM PURCHASED:

NAME

ADDRESS

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)  
685' N 450' E fr SW cor. Sec. 34

SECTION-TOWNSHIP-RANGE OR BLOCK AND SURVEY  
T.5N., R.31E., Sec. 34, SW,SW,SW

DEDICATION  
(COMPLY WITH RULE G-105)

FIELD AND RESERVOIR (IF WILDCAT, SO STATE)

Temperature gradient well

COUNTY

Apache County

DISTANCE, IN MILES, AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

PROPOSED DEPTH:

Unknown at present

ROTARY OR CABLE TOOLS

Rotary

APPROX. DATE WORK WILL START

September 1, 1982

WELL STATUS

WELL

ORGANIZATION REPORT

ON FILE

OR ATTACHED

FILING FEE OF \$25.00

ATTACHED

REMARKS:

CERTIFICATE: I, THE UNDERSIGNED, UNDER THE PENALTY OF PERJURY, STATE THAT I AM THE Geologist

OF THE Phillips Petroleum (COMPANY), AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT;  
AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE,  
CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

SIGNATURE

August 5, 1982

DATE

PERMIT NUMBER:

8228

APPROVAL DATE:

8-10-82

APPROVED BY:

R. G. ytaner

NOTICE:

BEFORE SENDING IN THIS FORM BE SURE THAT YOU HAVE GIVEN  
ALL INFORMATION REQUESTED. MUCH UNNECESSARY CORRESPOND-  
ENCE WILL THIS BE AVOIDED.

STATE OF ARIZONA  
OIL & GAS CONSERVATION COMMISSION

APPLICATION TO DRILL OR RE-ENTER

FILE TWO COPIES

FORM NO. C-3

OPERATOR SHALL OUTLINE THE DEDICATED ACREAGE FOR GEOTHERMAL RESERVOIR WELLS ON THE PLAT.

A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF ARIZONA OR APPROVED BY THE COMMISSION SHALL SIGN ON THE PLAT THE LOCATION OF THE WELL AND CERTIFY THIS INFORMATION IN THE SPACE PROVIDED.

ALL DISTANCES SHOWN ON THE PLAT MUST BE FROM THE OUTER BOUNDARIES OF THE SECTION.

IS THE OPERATOR THE ONLY OWNER IN THE DEDICATED ACREAGE OUTLINED ON THE PLAT BELOW? YES ☐ NO ☐

IF THE ANSWER TO QUESTION FOUR IS "NO" HAVE THE INTERESTS OF ALL THE OWNERS BEEN CONSOLIDATED BY COMMUNITIZATION AGREEMENT OR OTHERWISE? YES ☐ NO ☐ IF ANSWER IS "YES" TYPE OF CONSOLIDATION \_\_\_\_\_

IF THE ANSWER TO QUESTION FOUR IS "NO", LIST ALL THE OWNERS AND THEIR RESPECTIVE INTERESTS BELOW:

Owner	Land Description
USDA - Forest Service	T. 5 N., R. 31 E., Sec. 34

**CERTIFICATION**

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Name Ray Chadburn

Position Geologist

Company Phillips Petroleum

Date August 5, 1982

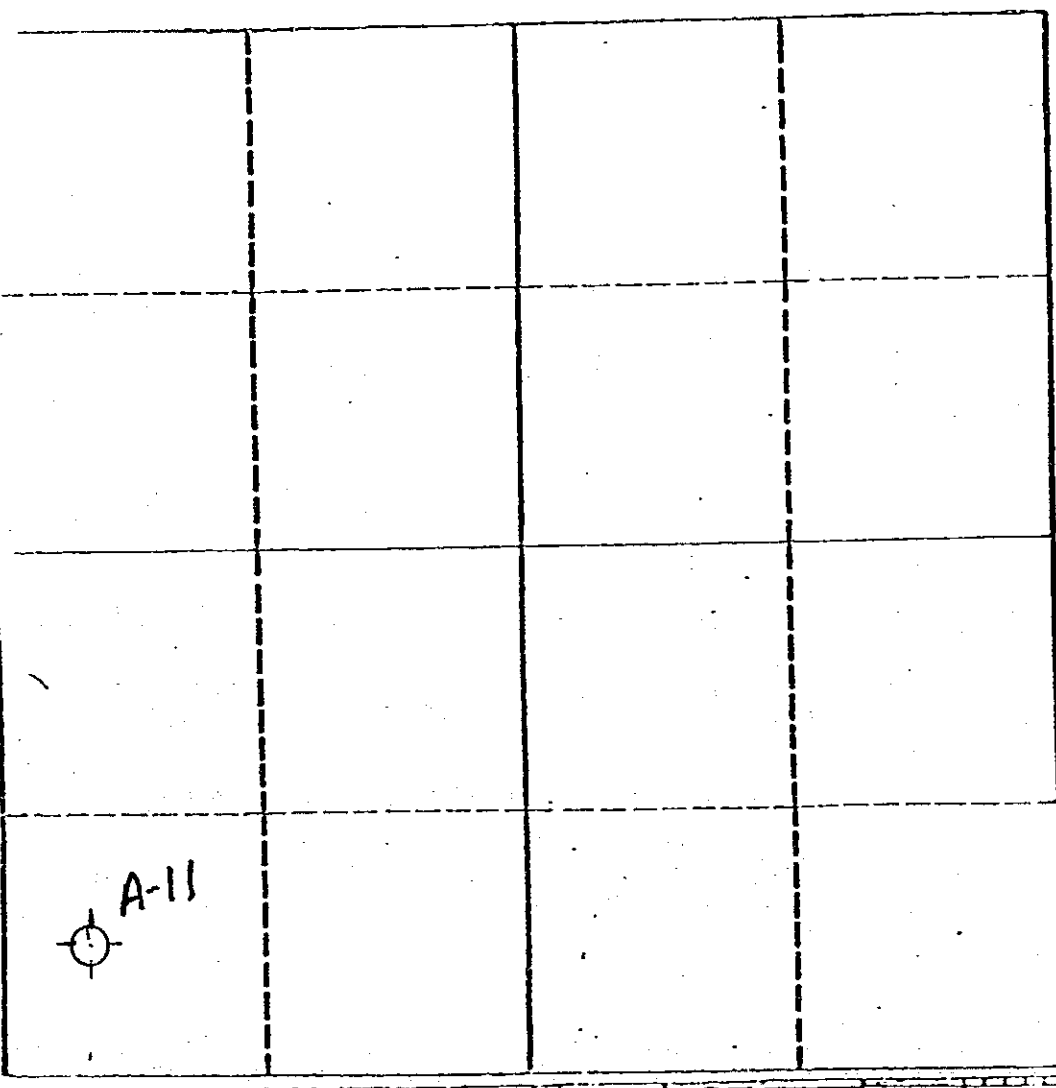
I hereby certify that the well location shown on the plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed \_\_\_\_\_

Registered Professional Engineer and/or Land Surveyor \_\_\_\_\_

Certificate No. \_\_\_\_\_

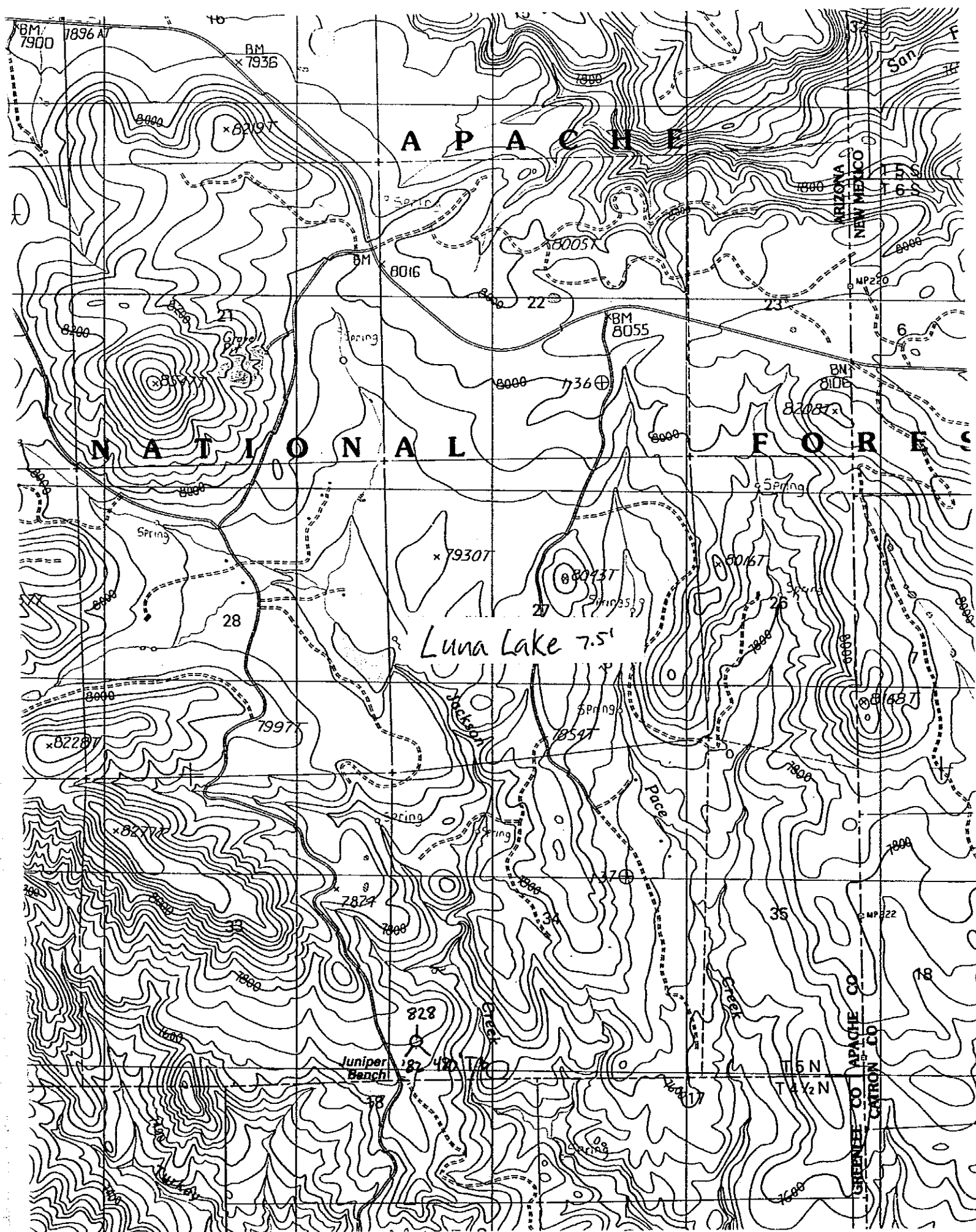
A-11

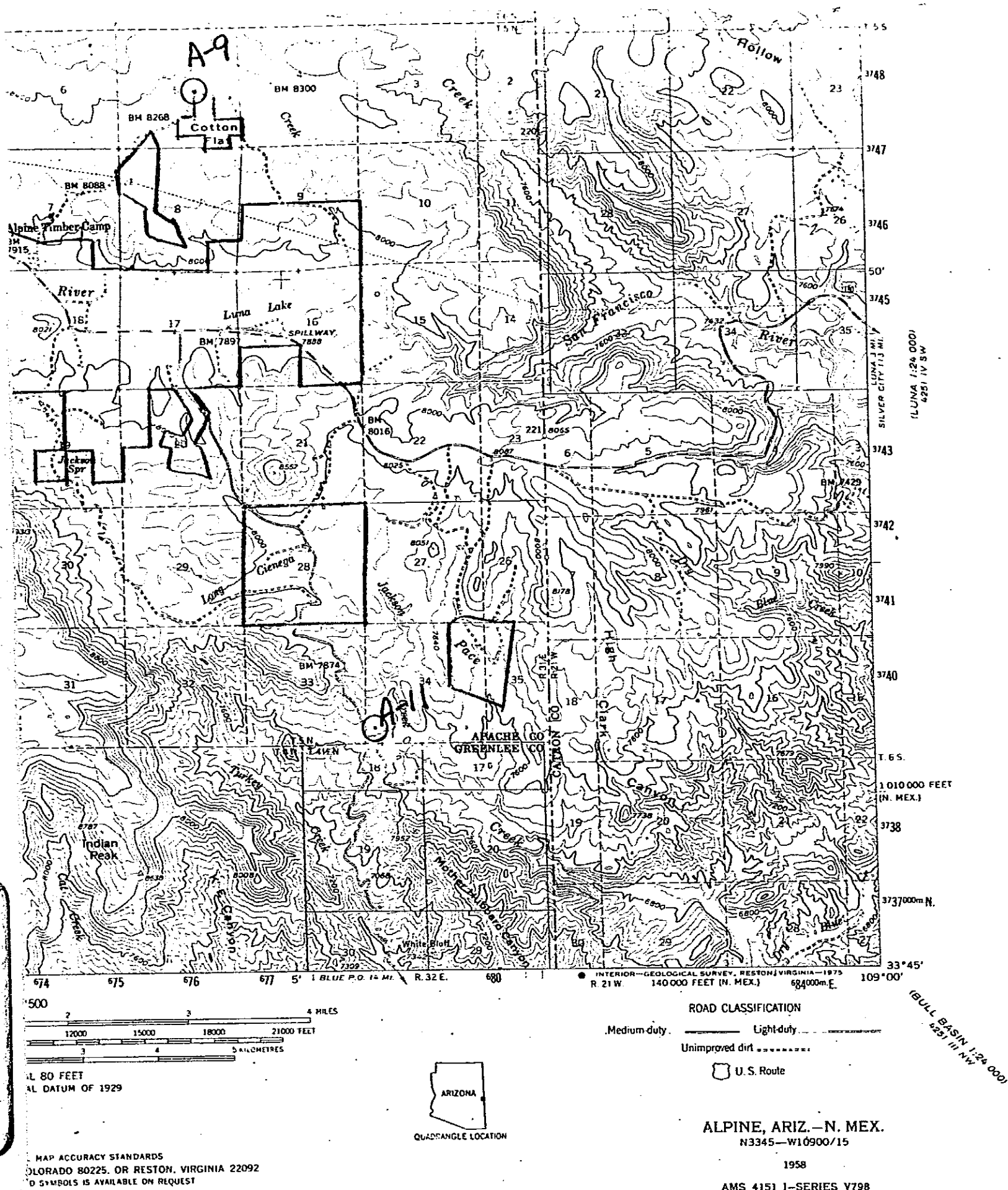


0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

PROPOSED CASING PROGRAM

Size of Casing	Weight	Grade & Type	Top	Bottom	Cementing Depths	Sacks Cement
6" hole to T.D. Install 1" PVC pipe filled with water. Measure temperature there in. Plug and backfill within 2 years				to T.D.	Plugged at bottom and	







## PERMIT TO DRILL

This constitutes the permission and authority from the  
OIL AND GAS CONSERVATION COMMISSION,  
STATE OF ARIZONA,

To: PHILLIPS PETROLEUM COMPANY  
(OPERATOR)

to drill a well to be known as

A-11 FEDERAL  
(WELL NAME)

located 685' FROM SOUTH LINE & 450' FROM WEST LINE (SW SW SW)

Section 34 Township 5 NORTH Range 31 EAST, APACHE County, Arizona.

The NA of said  
Section, Township and Range is dedicated to this well.

Said well is to be drilled substantially as outlined in the attached Application and must be drilled  
in full compliance with all applicable laws, statutes, rules and regulations of the State of Arizona.

Issued this 10th day of August, 1982.

OIL AND GAS CONSERVATION COMMISSION

By [Signature]  
EXECUTIVE DIRECTOR

PERMIT 00828

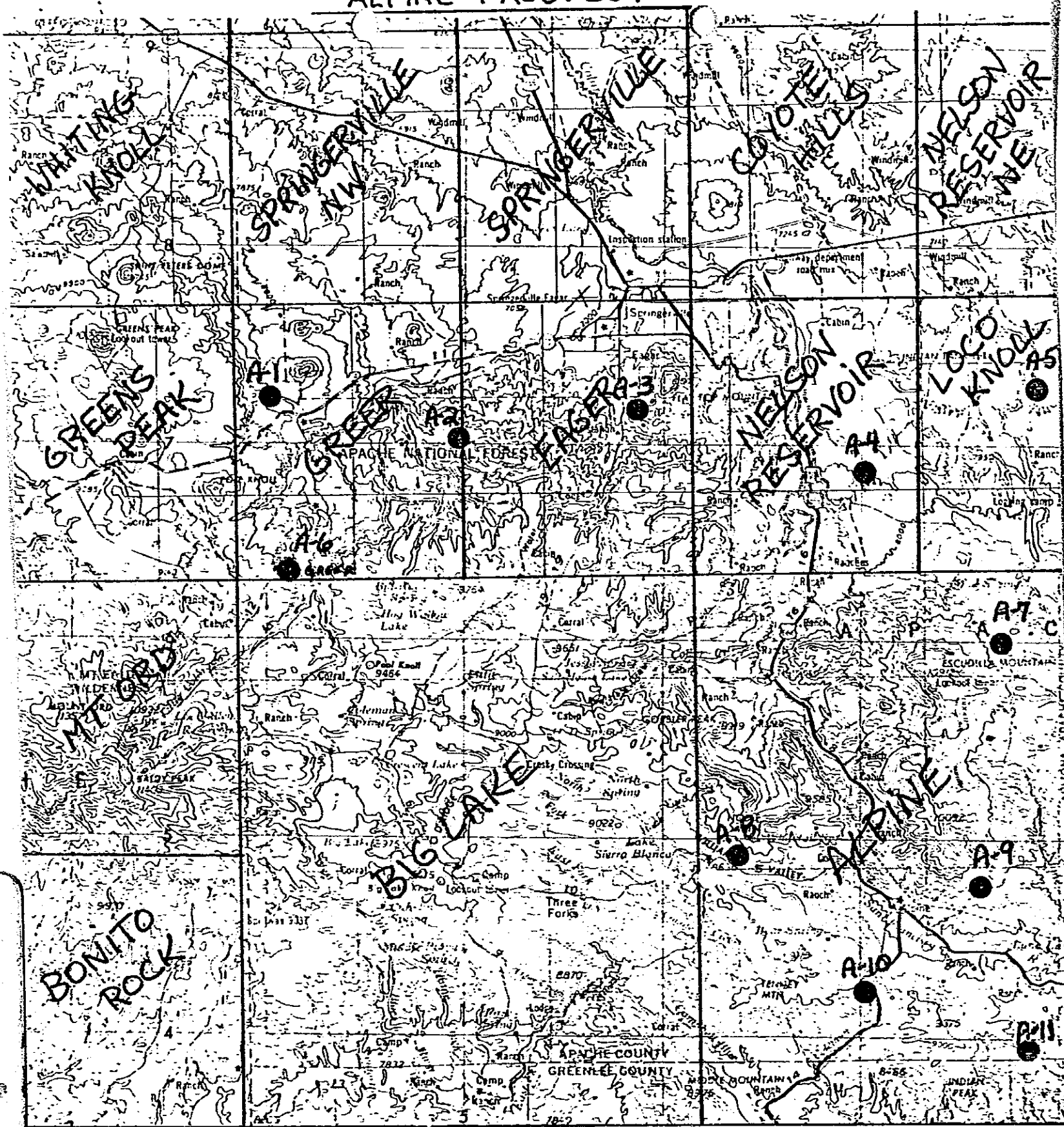
RECEIPT NO. 2297

A.P.I. NO. 02-001-20276

State of Arizona  
Oil & Gas Conservation Commission  
Permit to Drill

FORM NO. 27

# ALPINE PROSPECT







Fife Symington  
Governor

State of Arizona  
**Arizona Geological Survey**

845 North Park Avenue, #100  
Tucson, Arizona 85719  
(602) 882-4795



Larry D. Fellows  
Director and State Geologist

December 9, 1992

Mr. Gene Suemnicht  
3038 Las Mesitas Drive  
Santa Rosa, California 95405

Dear Gene:

In response to your inquiry, I have enclosed a summary of wells in the Springerville area and the locations and geologic logs for Phillips' temperature gradient holes in the Nutrioso area. Unfortunately, the temperature data on the Phillips' wells is not in our files.

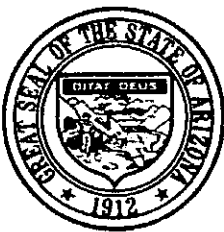
Let me know if I can be of further assistance.

Sincerely,

*Steven L. Rauzi*

Steven L. Rauzi  
Oil & Gas Program Administrator

Enclosures



Fife Symington  
Governor

State of Arizona  
**Arizona Geological Survey**

845 North Park Avenue, #100  
Tucson, Arizona 85719  
(602) 882-4795



Larry D. Fellows  
Director and State Geologist

October 9, 1992

Mr. Jim Lovekin  
Director of Geothermal Resources  
California Energy Company  
900 North Heritage Drive  
Ridgecrest, California 93555

Re: **Phillips Petroleum Company's Alpine Prospect,**  
Apache County, Arizona

Dear Mr. Lovekin:

I recently became aware that California Energy Company has acquired the data associated with the above referenced prospect.

Our file on this prospect contains the completion reports and lithologic logs for each of the wells in the project. I have enclosed a copy of the permit numbers and the table of locations for these wells. However, our file contains no temperature data. The temperature data must have been overlooked when Phillips forwarded the completion reports and lithologic data to this office.

I would very much like to complete our file on these wells and to that end I am asking that you kindly favor this Commission with the missing temperature data.

Sincerely,

*Steven L. Rauzi*

Steven L. Rauzi  
Oil & Gas Program Administrator

Enclosure



**PHILLIPS PETROLEUM COMPANY**

SALT LAKE CITY, UTAH 84107  
655 EAST 4500 SOUTH PHONE: 801 263-3129

MINERALS GROUP  
Geothermal and  
Strategic Minerals Division

RECEIVED

DEC 1 1982

O & G CONS. COMM.

November 29, 1982

Re: Completion  
Alpine Prospect, Arizona  
E-6022

A.K. Doss  
Oil and Gas Conservation Commission  
State of Arizona  
1645 West Jefferson, Suite 420  
Phoenix, Arizona 85007

Dear Mr. Doss:

Please find enclosed one copy each of well completion reports and lithologic logs for temperature gradient holes drilled in the Alpine-Springerville area of Apache County, Arizona. All of the holes have been properly plugged and abandoned.

Please hold all information concerning this prospect confidential.  
Thank you.

Sincerely,

*Gary F. Chadburn*  
Gary F. Chadburn  
Geologist

GFC:sdm  
Enclosures

August 10, 1982

Mr. Gary F. Chadburn  
Phillips Petroleum Co.  
655 E. 4500 South  
Salt Lake City, Utah 84107

Re: Permits to drill - Alpine Prospect

Dear Mr. Chadburn:

Enclosed are approved applications for permit to drill, permits to drill, and receipt for eleven temperature gradient holes located on Apache National Forest lands.

If we can be of further service, please advise.

Sincerely,

R. A. Ybarra  
Enforcement Director

/os  
Enc.



**PHILLIPS PETROLEUM COMPANY**

SALT LAKE CITY, UTAH 84107  
655 EAST 4500 SOUTH PHONE: 801 263-3129

MINERALS GROUP  
Geothermal and  
Strategic Minerals Division

RECEIVED

AUG 9 1982

D & G CONS. COMM.

August 4, 1982

Re: Applications for permits  
to drill - Alpine Prospect

Mr. A. K. Doss  
Oil and Gas Conservation Commission  
State of Arizona  
1645 W. Jefferson, Suite 420  
Phoenix, AZ 85007

Dear Sir:

Please find enclosed two copies each of Applications to Drill for eleven (11) temperature gradient holes located on Apache National Forest lands between Springerville, Arizona and Alpine, Arizona in Apache County. Also enclosed is a table of locations, area map, and topographic map copies depicting the specific locations of the holes.

A check in the amount of \$275.00 is included for the required filing fee of \$25.00 per hole. Drilling is scheduled to begin on September 1, 1982.

If there are any questions concerning the applications, please let me know. As in the past, I shall keep you informed of our activities.

Very truly yours,

Gary F. Chadburn  
Geologist

GFC:co  
Encl.

RECEIVED

AUG 9 1982

O & G CONS. COMM.

PHILLIPS PETROLEUM COMPANY  
ALPINE PROSPECT  
TABLE OF LOCATIONS

A-1	T. 8 N., R. 27 E., Sec. 15, NE, SE, SW
A-2	T. 8 N., R. 28 E., Sec. 27, NE, SE, NW
A-3	T. 8 N., R. 29 E., Sec. 21, SE, NE, NE
A-4	T. 8 N., R. 30 E., Sec. 35, SE, SW, NW
A-5	T. 8 N., R. 31 E., Sec. 15, SE, NE, SW
A-6	T. 7 N., R. 27 E., Sec. 15, SE, SE, NE
A-7	T. 6 N., R. 31 E., Sec. 4, NE, NE, NE
A-8	T. 6 N., R. 29 E., Sec. 36, SE, SE, NE
A-9	T. 5 N., R. 31 E., Sec. 5, NE, NW, SE
A-10	T. 5 N., R. 30 E., Sec. 22, SE, SE, SE
A-11	T. 5 N., R. 31 E., Sec. 34, SW, SW, SW

GFC:cbo  
8/3/82

DEAL/LEASE NO. Job #E-6022

1564

	RFE NO.	AUTH. NO.	AMOUNT
BONUS			\$
BROKERAGE OR COMMISSION			
		DIV. NO.	
RENTAL			
FILING FEE			
DOC. STAMPS			
EXCH. FEE			
Misc.	82802		\$275.00
TOTAL			\$275.00

PAYABLE TO

Oil and Gas Conservation Commission  
State of Arizona

ADDRESS

1645 West Jefferson, Suite 420  
Phoenix, Arizona 85007

SOC. SEC. NO.  
OR I.D. NO.  
(REQ. BY LAW)